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ORIGINAL LECTURES.

CLINICAL LECTURE ON SOME CASES OF ABDOMINAL DISEASE IN WOMEN.

BY MR. LAWSON TAIT.

(Reported for the *Philadelphia Medical Times*.)

AT the Hospital of the Jefferson Medical College, on September 15, the day of the opening of the preliminary course of lectures, a large company of physicians and students were present, by invitation, to attend a clinical lecture by Mr. Lawson Tait, of Birmingham, England.

Professor Parvin introduced the lecturer in a few words, as one who needed no introduction to the most of those present.

Mr. Tait said :

I really do not know what Dr. Parvin has brought me here for, unless in his desire to show me attention he wishes to overwhelm me with kindness. I know that this is a tendency you have here, to overwhelm visitors with kindness, as it is sometimes in my own country. I have been told constantly since my arrival that I am in the country of big things; and now I find myself in the city of biggest things. I was, this morning, in the biggest store I ever saw, and to-day I ate the biggest oyster I ever ate in my life, and now I am in the biggest amphitheatre of any medical college anywhere. I know that we have nothing like it in England.

Now I am asked to do the biggest thing of all, and to lecture to you upon cases that I never saw until a few minutes ago, and examined only for about ten seconds each. Under these circumstances it is not unlikely that I may make some mistakes, and make a diagnosis which is incorrect; but if I do so I must ask you to pardon me, not because I am often given to making mistakes of this sort,—I hope I am not,—but because since I have been here I have been taken somewhat with the American disease, and am too much disposed to "hurry things."

Before bringing the cases before you, let me say a word upon the diagnosis of abdominal affections. It has been said that the most difficult thing in the world is

a diagnosis in the belly. I am in the habit of illustrating this in a familiar way, in this manner: here is a table; it has a table-cloth on it. Now, I know that this is a table and table-cloth, but it is impossible for me to say what kind of wood is in the table until the cloth is removed. Just so is it with abdominal growths.

Now, it is just in this character of disorder that hurry is most likely to cause mistakes of a serious character. In no other department is a careful diagnosis more needed than in abdominal surgery; for you proceed immediately to perform an operation for its relief, and you are sure to be found out if you make a mistake.

A distinguished American physician told me the other day—and I shall not forget it—that a doctor may tell his patient that he has dulness here or râles there, and the patient moves off, and no one can tell whether he was right or not; but in abdominal surgery if we make a mistake we proceed to act at once upon the diagnosis by opening the abdomen. Therefore, on account of the obscurity of the case and the serious consequences of a mistake, you should act with the more caution in making up your opinion.

In proceeding to examine the patients brought before you, I will ask again that you bear in mind the necessity of careful and thorough investigation of the cases, and that, in consequence of my lack of opportunity to do this, I may make some mistakes: if I do so, and, upon subsequent examination, Dr. Parvin finds reason to correct any diagnosis that I may make this afternoon, you must pardon it.

REMARKS ON OVARIAN TUMOR, AND EARLY OPERATIONS FOR ITS RELIEF.

The patient who has just been brought in is suffering with a disease which is a very common one with us, and also, I have no doubt, quite common with you: it is said to be a case of ovarian tumor by those who have had her under their care.

Upon exposing the prominent abdomen and inspecting its surface, the first thing that strikes my eye is the scar of a puncture near the navel and on a level with it, and a second one a little lower down. These are the marks of two tapplings of the abdomen, which were not ordered by any one here. Upon this I will speak further in a few minutes.

* Corrected by the author.

You notice that there is a symmetrical uniformity about this abdomen. Now, whenever you see a symmetrical enlargement of the abdomen, you should suspect that it is not due to an ovarian tumor. It is likely to be one of three things: (1) pregnancy, which you must always eliminate; (2) a small tumor, or malignant growth in the abdomen, accompanied by effusion of ascitic fluid; and (3) a parovarian tumor.

Let me give you a word of caution just here: when you are dealing with the abdomen for purposes of diagnosis, you can never be too delicate with your manipulations. If you handle the patient too roughly, you will frighten her, she will contract her muscles, and you will not learn a great many things which it is advisable that you should learn. If you handle patients roughly in operations, there is also danger that you may do them some harm.

I have now learned, by passing my hands gently over the abdomen in this case, several things. In the first place, the case is not one of pregnancy, although of this I had satisfied myself before; secondly, it is not a parovarian tumor; and I have also learned that, in the third place, it is probably a small growth with a large ascitic effusion. Just at this place in the lower portion of the abdomen there is a small solid mass, and there is a larger one in the upper part which is not solid.

Now, my task shall be to find out what relation there is, if any, between the two masses. Here, in the epigastric region, I get a tympanitic, an intestinal, note upon percussion, and also a wave of fluctuation; low down it is dull. This was very useful to the man who tapped her, and upon it he probably based his diagnosis, and it would have given us considerably more information if the case had not been tapped; but now I am unable to say which of two conditions that may be present is before us, although it is important to know this, for upon it depends the advice we will give in the case. This softer portion may be an ovarian cyst which has partially collapsed after being emptied by tapping, or it may be an abdominal effusion. If it is the former, and an ordinary multicystic tumor, the treatment is perfectly easy and the result will be favorable; if, on the contrary, it is a small tumor surrounded by a large quantity of ascitic fluid, the state of the case is very much altered, and there

are several things to be considered. I have found in the pelvis a small tumor over to the left, which may be the ovary in a state of incipient cystoma; it may be a papilloma, or it may be a malignant proliferation from some of the viscera. It is important to find out which of these it is. Now that we have fluid in the abdomen, it is impossible to come to a very definite conclusion, but could we have seen the patient before she was tapped, the relations of the intestines and the fluid would have aided the diagnosis. The growth may have been from a cyst of the ovary, but I think myself that the fluid was not removed from a cyst,—that it was ascitic; and it is probable that this tumor here is a papilloma. So far as I read the history, I think that the second is rather more likely.

Under these circumstances, what are you to do for such a patient? The first thing to do is to open the abdomen in either case. My experience teaches me that it is a surgical crime to allow a patient to go to her grave without an operation, where it offers a possibility of relief.

This leads me to speak of the condition of papilloma, which is generally regarded as most unfavorable. Now, on account of reasons which to you are evident, it is possible to speak more freely in the patient's absence than in her presence; and she will, therefore, be removed. I said that I would return to the subject of tapping. It is not at all an innocent operation, though it is not considered a misdeed to tap by many physicians. In my own country the practice of tapping still prevails, and, possibly, in this country: so I have not too much to say when a case is brought to me for operation after it has been tapped; but in my opinion there are very few cases in which it is justifiable to tap a patient; the only exception I would make would be in malignant disease. Let me say with regard to the effects of tapping upon the subsequent mortality after operation, that I have not lost a case after ovariotomy for several years, except those which had been previously tapped. It is perfectly positive that the greatest danger in a case does not come from adhesions, or such complications, but from tapping. No matter how difficult the case was, if it had not been tapped it did well. I think that the explanation is a chemical one. The fluids in the interior of cysts are very rich in some complex

kinds of albumen. I have made very many examinations of these fluids, testing them after various methods, and have come to the conclusion that no two kinds of cysts have fluids exactly alike. But all the cases I have lost were cases which had been previously tapped. I think that the reason for this lies in the physiological fact that the removal of this albuminous fluid renders the blood more coagulable. After the operation, the clot which forms in the pedicle runs backward in the vessels, and causes death from cardiac thrombosis.

My experience, therefore, makes me say that there should be no tapping. When a patient with an abdominal growth, ovarian or not, comes into the hands of a physician, his duty is either to remove the tumor without delay, if his experience and aptitude for operating are sufficient to undertake the case himself, or, if not, to hand it over to the care of one of his colleagues who has the skill and ability, for the credit of abdominal surgery, which both of them represent and desire to honor.

To return to our case: this patient has been tapped, and my impression is that the fluid was ascitic. The position of the punctures is above the line of the ordinary place for tapping ovarian cysts; the surgeon who did this tapping probably felt this comparatively solid tumor at the base, and believed himself more likely to reach fluid at this point than lower down, at the point of election. This, of course, is based upon the supposition that you are accustomed to follow the same rule that surgeons at home are, of tapping usually about half-way between the umbilicus and the pubes.

With regard to tapping, I rarely find myself called upon to perform tapping in preference to ovariotomy. I do not find the objection on the part of patients to operating that existed ten or twenty years ago, but I have not had a patient for the last five or six years who urged such objection or refused operation. When you can say positively, as you now may, that ninety-six per cent. of such operations should get well, you are not likely to meet with refusal. But, you may say, are there not cases which have been tapped many times without apparent injury?

I remember that I saw in the county of Hants a tombstone that bore an inscription declaring that the deceased had been tapped for ovarian dropsy forty-seven times.

Being on a tombstone, of course it must be true: if so, this is the largest number of such tappings on record. My reply is that these large cysts are generally not ovarian but parovarian cysts; they are filled with a fluid of low density, which contains almost no albumen, and very little salts. Now, it is easy to conceive that in a single large cyst with a fluid which does not contain much albumen, the tumor may be tapped many times without weakening the patient very much; but in an ovarian cyst filled with albuminous fluid the result would be very different. This fact, then, would be no argument in favor of a change in treatment and a return to the practice of tapping ovarian cysts, a practice which is now less frequent in England than it used to be, chiefly through the efforts of my friend Dr. Bantock and myself.

An early operation is advisable. The patient is not subjected to the physical labor of carrying around a large growth, she is less likely to have papilloma, and, finally, if a young woman, she will be glad to be relieved of the annoyance, if not more, of exciting observation by her large abdomen. The surgeon will find an early operation desirable, because the tumor is small and more easily removed, he will be less likely to find adhesions, the operation will be more readily done, there are fewer chances of having recurrent attacks of inflammation or peritonitis afterwards, and, finally, the danger from early operations is almost *nil*. I have little hesitation in saying that, in a series of early operations, where there had been no tapping, the mortality would not be over one per cent. If you should hear the contrary opinion expressed with regard to tapping from that I have just given you, you will find generally that it is by a white-haired man, while you will hear the opinion that I have expressed from those whose hair is brown or just on the turn; that is, the younger men advocate this view, the older men condemn it. I do not mean to imply that young men are always right and that old men must be wrong. There is a proverb, "Young men think old men fools, but old men know that young men are fools." I mean simply to teach that science is constantly progressing from age to age, and that each age is something in advance of that which preceded it.

Perhaps I ought to say one word about this case in conclusion. Suppose that I be-

lieved that this patient was suffering from papilloma—the disease which we so much dread after opening the abdomen—developing around a tumor: I would still proceed to remove the tumor, even if I were certain that papilloma were present. And my reason for this is a very curious one. I cannot pretend to explain it, but the occurrence is one of which I am quite certain. I cannot say without my figures before me just how many times I have met with this condition, but it is certainly a hundred times. In operations especially, and in large proportion in ovarian tumors, also in cysts of the parovarium and in myoma, and sometimes when there was no tumor at all, when I opened the abdomen for exploratory purposes, without knowing what I would find, have I encountered this curious velvety condition of the peritoneum which I recognized as papilloma. I remember a case seen by Mr. Pemberton, my colleague at Birmingham. The patient, a young lady, had an enormously enlarged abdomen, due to ascites, a fact I had recognized. I opened it by incision, as my practice is to make a small incision for exploration and drainage; by this means the fluid is evacuated just as well as with the trocar, but you cannot feel anything with a trocar, but with a clean cut of two or three inches you can introduce one or two fingers, and find out the actual condition of the pelvic organs as you can in no other way. I may add that I always make the exploratory incision for the removal of fluid, and find that it readily heals. Now, in this case of which I am speaking, I opened the abdomen and I found the peritoneum universally covered with papilloma. I simply put in a drainage-tube and cured the patient. It is now four years since this was done, and the patient remains entirely well.

I recall another case which I operated upon several years ago. Papilloma was present, and I was obliged to leave two masses in the abdomen. She is now about sixty-five years of age, the tumors have entirely disappeared, and she is perfectly well.

I have, therefore, concluded that there are two kinds of papilloma, malignant and non-malignant: one kills the patient in a few weeks or months, and from the other the patient will recover after an operation. I have carefully taken specimens from each and subjected them to microscopical examination, and competent experts could find no difference whatever. The non-malignant

cannot be distinguished from the other. There is no question but that there are certain cases, however, in which it is malignant, nor that in others it is perfectly curable. So that, even if I knew this to be a case of papilloma, I would open the abdomen, and, if possible, remove it, for it is possible that by the removal of the tumor I may cure the patient.

I said, "if possible," to remove the tumor. This reminds me that, after opening the abdomen, you must (let me use an American word here) "prospect" a little, and make up your mind fully what you shall do. The most fatal operations are those which have been abandoned after removal of a portion of the growth. If you remove part of the tumor and feel tired, and feel like closing the abdomen, remember that you are exposing your patient to a condition the mortality of which is about sixty per cent., but, if you have the courage to finish the operation, you may cure your patient.

In these cases, of course, skill in manipulation is necessary, and this will come by experience. If your experience and courage are not equal to the operation, place your patient in other hands, and the result will be a better one for your reputation and for the patient.

REMARKS UPON EXPLORATORY LAPAROTOMY AND REMOVAL OF THE UTERINE APPENDAGES.

The next case is one which involves considerable difficulty in diagnosis, and requires a knowledge of the past history of the patient in order properly to decide the question of treatment. This knowledge I have only very imperfectly obtained from my few moments' conversation with her, but I will take it for granted that the young girl's sufferings are real and intense as she states, and that everything has been done for her relief that could be done by medical means. Now, I might supplement this by giving you an account of a similar case which I operated upon the other day in the State of New York, where the history was better known to me than this one is, or I might cite some cases under my own care at home, which were treated by removal of the diseased uterine appendages; but I will not take up your time with such accounts, because I wish to discuss with you a few points in relation to the operation itself as compared with other means of treatment.

She is a young girl, 21 years of age, and has a pronounced crop of acne upon her face. When a woman comes into my consultation-room with a crop of acne, I always ask for a copy of the prescription that she has been taking, and I expect to find that it is bromide of potassium, which is the fashionable drug in the practice of some physicians for all the ills that women suffer from. I never met with anybody who could swear that he cured any woman with it, but it is a convenient pump-handle and appears to be diligently worked.

I usually am told, in answer to my questions as to previous treatment in these cases, "Oh, yes; I have taken lots of bromides. I went to Dr. A., Dr. B., Dr. C., Dr. D., Dr. E., and Dr. F., and Dr. A. gave me bromide of potassium, Dr. B. gave me bromide of sodium, Dr. C. gave me bromide of ammonium," and so on. The latest that I heard of was the bromide of nickel. Finally, she stumbles upon Dr. F., who puts in a pessary; for what, goodness knows, but he finds her ailing, and puts in a pessary, and the chances are that it does harm instead of good.

I removed a pair of Fallopian tubes crammed full of pus, just before I left England, from a woman who had spent eighteen months not in "riotous living," but in going round through a course of doctors. Another patient had a tray-full of pessaries, of various shapes and sizes. She would exhibit them as curiosities. "This one," she would say, taking one up in her fingers, "was inserted by Dr. A., and I wore it a week; Dr. B. introduced this one, and I could only wear it a few days; and this one must have been invented by the devil himself, for I could not wear it at all."

To return to our supposed case: she finally leaves the pessary-doctors, and the bromides, and goes to another, who dilates and splits the cervix uteri. So she goes from one quack to another, until she comes under the care of a surgeon who will operate and relieve her. I do not mean to declare that all women suffering with menstrual disorders require operation; by no means; although I have been misrepresented as saying this. I have never said it. But I mean to say that a large number of cases of these suffering women demand and require relief by operation; and of this class I believe that our patient here is one.

Now, if a woman with a history of wan-

dering about for a considerable period among different physicians, seeking relief from menstrual disorders and finding none, who has used various contrivances without benefit, and taken many drugs, almost to the destruction of her health, comes to you, and you are persuaded from the account she gives of herself that her sufferings are real and not imaginary, you are justified in making a small incision in the abdomen and in putting your fingers down into the pelvis to find out if you can relieve her.

I have been accused of abusing this operation, but, I think, unjustly. Every new operation is liable to be abused, but increasing experience soon teaches its proper limits.

I said that before operating you should be satisfied that the patient's sufferings are real and not imaginary. How can we ascertain if the patient's sufferings are real? Now, in my experience, I have always found that if, after putting the operation conscientiously and fully before the patient, she consents to undergo it I have never operated without finding something the matter that would warrant the operation. You may say that this is placing too much responsibility upon the patient; but is it not what we have to do in other departments of surgery? A man comes with a chronic disease of the knee requiring operation,—amputation or excision. The surgeon explains the risks and advantages of each operation to the patient, and recommends one or the other, but the patient must take the responsibility of deciding. I always explain the operation carefully, and say that I will consult with her medical attendant or any number of them that she wishes, but the result of the consultation must be laid before the patient, and she must take a large share of the responsibility in the decision.

There are persons who have declared that this operation is done for low and immoral purposes. The first reply to this is that the operation is always done in such a public way as to refute any such charge. It cannot be done without being known: there are always nurses in attendance, who would tell of it, and it could not be kept secret. It is true, I have been approached by women who did not wish to bear any children; but we have some conscience left; and those who perform this operation are not to be considered as having less scruples than other surgeons. Moreover,

as I have just said, the operation is a semi-public one, and it would soon be known if it were done with such motives. So far as I know, it has never been openly and directly charged upon any one in England that an operation of this kind was done for immoral purposes.

It has also been said that the operation is done sometimes for another immoral purpose,—simply on account of the fee. But if this is brought to me, it might raise the same question with regard to the others who give bromides, put in pessaries, or divide the cervix. I think that the balance of the argument is in my favor: at all events, I have thrown down the gauntlet in England, and no one has yet taken it up.

Now, to return to this young girl. She is obliged to work for her living. Circumstances are very much against a patient who must earn her own living, as compared with one in comfortable circumstances in her own home. Luxury is much in favor of relief from ovarian disorders. A woman who can rest during her painful menstrual period is better situated for recovery than one who is obliged to work for one week in every month while suffering, and the latter requires relief by operation more decidedly than the former.

When a woman like this comes before you, who is compelled to work in order to live, and for one week in the month is incapacitated from working, you may be certain that stopping menstruation will give her relief, and you can do so just as truly as, in another patient whose eyes only see at twenty feet, you may by proper glasses enable him to see at a normal distance.

In this case, I have no doubt, if I could examine her, I would find her Fallopian tubes in a state of inflammation; but, even if they were found to be perfectly healthy, it would be better to remove them and stop this terrible suffering at each menstrual period.

About the consequences of the operation let me speak a word. I recall that a certain eminent ecclesiastic opposed the practice of vaccination and publicly stated in a sermon that dreadful things, such as a cloven hoof, and horns upon the head, would be caused by it. Now, it appears that we are treated in much the same way about this operation. We are told that the patients will get masculine, and that there will be an overgrowth of fatty tis-

sue, and various other imaginary results. I am reminded, when I hear this, of the German professor who evolved a camel from his inner consciousness. It is well known, from the practice in Eastern countries of removing the testicles in men and ovaries from women, that, if the operation be done before puberty, the patient will retain to some extent the infantile type: the hair does not develop upon the face, nor does the voice change in men; but these consequences do not occur when the operation is performed after adult age has been reached. I have removed the ovaries in many cases and for various diseases, and I have never seen any of these asserted bad results, and no changes in the condition of the individual except for the better.

These ridiculous exaggerations I have referred to you will find in the first edition of Spencer Wells, and to my surprise I found them still more marked in the second edition: they are without any foundation in fact whatever. On the contrary, in the great majority of cases there is immediate relief from the sufferings and from loss of blood. Perhaps entire relief may be delayed for several months, and in some cases it may not come at all; but, I ask you, is this a valid argument against the operation? The operation for cataract sometimes fails, there is suppuration of the globe, irido-cyclitis, or other accidents which may lead to failure; and I might bring examples from other departments of surgery that would also illustrate this point. In fact, the operation of ovariotomy for the relief of pain and hemorrhage gives good results in comparison with other operations.

It is true that woman may have some inconveniences associated with the climacteric, but she would be obliged to go through them some time or other if she lived: they are part of her menstrual life. Some women have very little trouble, while others have a good deal and may become drunkards, etc. Fortunately, I have never seen any such results following the operation.

There is one condition, however, which I have seen develop after ovariotomy, after removal of one or both ovaries, and even also removal of the uterus. It is a condition of acute melancholia. I have operated now over nine hundred times, and have seen seven such cases in all. Taking

into account the fact that I lost more of my earlier operations, I think that we may take it for granted that about one per cent. of our cases will take on this form of insanity and will die with the disease. I do not know if other surgeons have met with anything like so many cases in their operations; but we must bear in mind that for some unaccountable reason certain of our cases will be attacked by melancholia. It is the one objectionable point in the operation of which I am aware.

UTERINE MYOMA.

The next case is one of myoma of the uterus; in fact, we have two cases, which I will briefly discuss, without bringing them in, since you could feel nothing, and certainly can see nothing, of the disease.

The first case is 48 years of age, and does not have very much hemorrhage, and I do not believe that she suffers very much pain. In her the tumor is very hard and consolidated. I think that this belongs to the class of cases in which nature is curing the disease and thus gradually relieving the symptoms. The other woman is 40 years of age, and has had hemorrhages: being younger than the former woman, an operation may be taken into consideration, since she has to be tided over some years before her climacteric.

We did not use to operate upon women with myoma, and now, if the patient is forty-seven, we do not operate before giving ergot a faithful trial; but in younger women, under forty, it becomes a very important question. It is a question in which the patient must take a good deal of the responsibility in answering, and contribute a good deal to the answer.

If the patient suffers every month, and loses blood for a week or more, this question comes up: is it preferable for the patient, say thirty-six years old, to go on for twelve or fourteen years suffering in this way, or to perform an operation the mortality of which is about four per cent.? I can only say that if I were the patient I should have the operation done.

Now, this is comparatively a common affection, and we meet with it often, especially in the colored race, in the dissecting-room and post-mortem table, in cases where it gave absolutely no trouble during life, so that we have come to look upon it as of little importance. We are laboring

under some traditions with regard to uterine myoma, and this is one of them,—that it is an insignificant affection. I need hardly stop to say that those myomas that give no trouble during life are not the ones that trouble us: it is those that *do* give trouble that apply to us for relief, which it is our duty to give them.

Another tradition with regard to myoma is that it will cease at the climacteric and give no further trouble; but we find that in many of these cases the growths go on developing for years after the menopause should occur, and the patient suffers from hemorrhages that severely affect her health.

There are two operations for the relief of uterine myoma: you may remove the uterine appendages, and by this you remove the tendency to these troubles which afflict the poor patient. It has been now several years—six or seven, perhaps—during which I have employed the operation, which I consider the proper one, as the hemorrhage almost always ceases soon after its performance. The other operation is the removal of the uterus itself; and this may be done if the hemorrhage does not cease after the removal of the uterine appendages.

Now I have come to the end of my cases, and have exceeded my time. What I have brought before you has not possessed the usual interest of a surgical clinic; but I hope that you will pardon that, in view of the important subjects which I have presented for your consideration. Any faults in the lecture you must attribute to my want of experience in lecturing. I have never delivered a clinical lecture in my life until a week ago. It seems to be very unfortunate that in England it is difficult for those who have experience to get the opportunity of teaching, while those who do the teaching have not the clinical experience. You must take what I have said, therefore, not as a lesson from a British teacher, but purely as the views of a British surgeon.

IMPOTENCE IN THE MALE.—Dr. Hammond, of New York, has employed the following with satisfactory results:

R Strychninæ sulphatis, gr. j;
Acid. phosphorici dilut., f3j.

Ten drops to be taken in a teaspoonful of the fluid extract of coca three times daily, before meals.

ORIGINAL COMMUNICATIONS.

SOME OF THE USES OF THE VAGINAL TAMPON IN DISEASES OF WOMEN, AND IN OBSTETRICS.

An Address delivered before the Lehigh District Medical Society at Mauch Chunk, August 19, 1884,

BY THEOPHILUS PARVIN, M.D.,

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IT was said that all roads led to Rome: in like manner, I have been informed that all addresses before your body are upon strictly professional subjects, thus leading to the one great end of medicine, the cure of the sick. In compliance with your design, and obedient to honored usage, my effort shall be to present a practical subject, the consideration of which it is hoped may be of some interest and usefulness. In announcing that subject as *Some of the Uses of the Tampon in Gynaecology and in Obstetrics*, let me make peace with those who possibly now think the theme and its discussion too elementary for the occasion,—being wise enough to know that one does not look for whales in the Euxine. For a moment conceding the force of the criticism, still an experience of more than thirty years of active professional work has taught me that my own failures and shortcomings, sins—I had almost said crimes—of omission and commission, were much more frequent in little than in great matters. In truth, observation likewise tells me that minor medicine and minor surgery often become major medicine and major surgery in their results for good or for evil. As it is urged in the religious life to learn from time to time that the foundation of one's faith is broad and strong, in order that the superstructure shall be durable, so in our medical life it may not be amiss, upon occasion, to consider even elementary questions, in order that, our knowledge being clearer and more certain, our judgment and action in emergencies will be unclouded with doubts, undelayed by hesitancy. Peradventure such study may have more practical value for all than a description of the most recently discovered microbe, or a discussion concerning the value of this week's favorite antiseptic.

Further, find me a single text-book upon diseases of women or one upon obstetrics in which the varied uses of the tampon are

fully set forth, and I will confess my mistake in the selection of a subject. Let me add, however, that Dr. Mundé has presented with commendable fulness of information and richness of detail the chief applications of the tampon in diseases of women in his well-known and valuable work; but that is not a complete treatise upon diseases of females,—only a book of so-called minor surgical gynaecology,—so that the challenge cannot be met by it.

Finally, it may happen, even in the partial study of the subject which the usual time of an address permits, that questions which are very far from being so simple and elementary as might be imagined may be presented.

Having said this much in explanation, hardly in apology, I pass to the consideration of the subject.

The tampon is one of the most ancient of therapeutic means. Many of the great masters in the past have recognized its value. Among the different pessaries recommended by Hippocrates* is one for menorrhagia, made of wool impregnated with different substances, and then introduced into the vagina,—plainly a tampon. Paul of *Ægina*† said that an admirable remedy for uterine hemorrhage was a sponge cooked in wine or in liquid pitch and applied. Moschion, who belonged to the age of Nero, recommended the tampon in uterine hemorrhage. By a writer also of one of the early Christian centuries a detailed description of a tampon for this purpose is given.‡ This tampon was made of powdered pennyroyal, galanga, spikenard, nutmeg, and cloves, mixed with an oil, and then placed in a linen cloth *veterem, rarem, et subtilem*, tying securely the powders in the linen, and the mass, having been formed in *modum pilæ*, was passed into the vagina, and secured by means of a bandage externally. No one can doubt the mechanical effect of a tampon thus made and applied. For the same disorder Ambrose Paré advised quinces roasted under the coals and incorporated with powder of

* Eighth volume of Littré's Hippocrates, p. 381.

† Sydenham Society's Edition.

‡ The following is the prescription found in *Gynaecorum*, etc.: *Pulverem pulegii; galangas, spice nardi, nucis muscatæ, caryophyllistar; miscet, distempera cum oleo muscellino, vel pulegino. Et accipe pannum lineum veterem, rarem, et subtilem, et intus ligas hos pulveres, formandum ad modum pilæ. Et matrice intromissa, os vulvæ cum dicta ut matrix iterum non exeat: et pilam ibi cum fascia superliga, ut non possit exire: et fascia transfixa retro usq. ad renes et intra illa, et ibi ligetur.*

myrtle and Armenian bole, then passed into the vagina.

The primary idea involved in the word tampon is that of a plug introduced into a cavity for the arrest of hemorrhage, and thus the tampon was used by many in ancient times; but, as we have seen, the old masters sought also to make it the vehicle for medicinal substances. Modern practice recognizes not only each of these uses, but others also. It will be convenient in the discussion of the subject to refer, first, to the uses of the tampon in diseases of women, and then in obstetric practice. Chrobak* describes the former under three heads: "First, the tampon is used to retain the dressing used after bilateral division of the cervix; a tent, or a stem pessary, to lessen the mobility of the uterus or to keep it in position after it has been replaced.

"Second, it is used for compression, and for the protection of ulcerated, eroded, or wounded parts from friction; it also absorbs their secretion and prevents that of the vagina from coming in contact with them.

"Third, it is used in hemorrhage, and in congenital or acquired contraction of the vagina."

The application of the tampon for the arrest of hemorrhage will be considered in connection with its obstetric uses; and as to the others in the list, time will permit only a few to be presented.

First, the tampon in certain uterine disorders of position. Doubtless the first of these in which the tampon was used was prolapse. Here, usually, the tampon presents an obstacle which, by its greater size, prevents the descent of the uterus. Sponges, rubber bags introduced into the vagina empty and then filled with air, a mass of cotton, of tow, and of other substances, have been thus used.

Dr. Copeman† reported, in 1874, a very interesting case of aggravated prolapse of the uterus successfully treated by a tow pessary; the tow "was covered at the top by, and partially enclosed in, a piece of linen greased on the outside to facilitate its introduction." I think it ought to be added that the external greasing of such a pessary ought to be done not merely to facilitate its introduction, but to prevent its irritating the part of the neck of the uterus resting upon it, and the vaginal walls with which it is in contact: a tow

pessary or tampon, even when partially covered with linen, if worn for any length of time, or frequently reintroduced, must cause considerable irritation.

But in those cases where the vagina retains its normal curvature, it is not necessary to have so large a tampon in order to secure support for the uterus. Archimedes, enthusiastic over the discovery of the great power of the lever, would move the world if he could find a place whereon to stand; and so the uterus can be upheld by a tampon which has its base resting upon the posterior wall of the vagina. This point will be made plainer in speaking of retroversion of the uterus, a positional disorder which always precedes prolapse.

As is now well established, posterior displacements of the uterus are more frequent in those who have had miscarriages or borne one or more children, and therefore oftener are brought to the notice of the physician. Moreover,‡ anteversion of the uterus, the bladder being empty, is normal in the parous, and therefore requires no treatment; while in the nulliparous, the uterus in a similar condition of the bladder is slightly anteflexed as well as anteverted, and then also no treatment is needed. Without considering the etiology and the diagnosis of posterior displacements,—the one not always clear, and the other usually very plain,—let me refer exclusively to the treatment of retroversion. Such positional disorder is only possible when the utero-sacral and round ligaments are greatly stretched, and such disorder is only permanently cured when these ligaments have been shortened, or, in other words, have resumed their normal length. The artificial shortening of the round ligaments, as proposed by Alexander, and successfully practised by him and others, for uterine prolapse, is conclusive proof, if any were necessary, of the elongation of those ligaments which occurs in a posterior displacement of the uterus. In the cure of the disorder it is important to give these uterine upholding bands rest, or at least restrict their action so far as can be done without seriously interfering with the normal mobility of the uterus. The practical bearing of this statement will be seen in the consideration of the special means of treatment recommended.

* See Billroth's *Handbuch der Frauenkrankheiten*.

† British Medical Journal, October, 1874.

‡ See Schultze's recent work, translated by Hergott, *Traité sur les Déviations utérines*.

Provided there be no restraining adhesions, the restoration of the uterus to its normal position is not difficult either with the fingers or the sound. Since the publication of Dr. Henry F. Campbell's* paper upon pneumatic self-replacement of the uterus, it has been held that the retroverted womb can be put in position by having the patient take the knee-chest position and permitting air to be admitted into the vagina. But the investigations† of Simpson and Hart show that in this position the retroverted uterus, while farther from the pelvic outlet, is more retroverted. How fallacious does our professional experience often prove! Doubtless hundreds of patients have, by direction of their physicians, daily or semi-daily taken this position, and, as both doctors and patients believed, the results were beneficial. Probably the only benefit was the temporary partial anaemia of congested organs and tissues. Nevertheless, although this position does not possess the advantages which have been attributed to it, and although justly characterized by Hart as "awkward and inconvenient," yet it is possible in it to correct a retroversion by the use of the finger in the vagina, or by means of the tenaculum, and then by a properly-applied tampon to keep the uterus in place. Nay, more, the elongation of the vagina which then occurs permits the tampon to be placed higher, fixing the uterus in a more elevated position than can be done when the patient is lying upon her side. However, the advantages in most cases do not compensate for the inconveniences and disagreeableness of the attitude, so that it may be dispensed with in most cases.

Whether the uterus be restored by finger, sound, tenaculum, or position, or by two or more of these combined, restoration must be followed by retention: the errant organ has been put in place, it must be kept in place. If the malposition be all, if the organ itself be healthy and there be no disease of structures adjacent to it, we have no better instrument for general use than the horseshoe pessary of the late Dr. Hodge, especially as modified by Dr. Albert H. Smith. But in how many patients do we find the body, and especially the neck, of the uterus diseased, or the conse-

quences of intra-pelvic inflammation, or an enlarged, tender, sensitive, partially-prolapsed ovary! Very many patients cannot at first bear a rigid support for the womb, the parts upon which a solid pessary presses are too sensitive, and the condition of a patient may be rendered much worse by such instrument. Among the pathological conditions which the cervix may present are unhealed tears that occurred in childbirth. These tears may be quite sensitive, secreting a more or less abundant, opaque matter, and red, bleeding upon the touch with finger or sound. And here let me refer for a moment to the subject which has engaged so much professional attention in this country during the last few years, tears of the neck of the womb, or, as more commonly, though not any more correctly, called, lacerations of the cervix. The latter expression may sound more scientific, and, possibly, in the mind of the sufferer magnifies the disease. The brilliant discovery made by Dr. Emmet a few years ago, and the very satisfactory results which follow the operation known by his name, when that operation is done in suitable cases, all know. But that the frequency and the importance of the accident have been greatly exaggerated, and that an operation for the cure of tears has been many a time unnecessarily performed, I do not doubt. Nay, further, more than once a woman has been made most unhappy by being told that her womb had been so badly torn in her labor that she would never be well until an operation was made, yet in such cases an examination made by competent men, who were too intelligent to be hobby-riders, found no lesions of the cervix, nothing but the ordinary boundary between anterior and posterior lips which the first labor makes. Many a practitioner has suffered unjust reproach because of such alleged injuries in childbirth.

Standing now in my fourth decade of professional life, I have seen changes in the theory and in the therapeutics of diseases of women as remarkable as those which Julian Hawthorne has described as occurring in Archibald Malmison. I remember, as if it were but yesterday, how one of my own most honored teachers insisted upon irritable uterus as the most important fact in uterine pathology, and that this irritability was the result of displacement of the organ, a displacement which was to be

* Transactions of the American Gynaecological Society, vol. i.

† Female Pelvic Anatomy, by D. Berry Hart, M.D.

remedied by a properly-adjusted pessary. Then the inflammation theory had its day of general acceptance. For a time, leucorrhœa, a mere symptom of several conditions, was not only made a disease, but claimed to open all uterine pathology.

Some years ago, the profession, under the guidance of the illustrious Sir James Simpson, became enthusiastic in praise of bilateral division of the neck of the womb for the cure of dysmenorrhœa and of sterility, but to-day the operation is not done in one of fifty cases in which it would have been done twenty years ago. I also believe that the operation for tears in the neck of the womb will not be done twenty years hence with anything like the frequency with which many now do it. Some of us are slow to think that nature is so cruel to woman in the exercise of her highest bodily function, giving birth to a child, that she necessarily suffers such tearing of her uterus in one case in three—or one in twenty—that it must be repaired by a surgical operation. On the other hand, some of us are slow to think that obstetric practitioners are so ignorant or so cruel that they permit or cause such accidents. It is exceptional when a woman first gives birth to a child that the os uteri is not torn; the chief tears are at the sides, especially the left side of the os; such tears at the side make the distinction between the anterior and the posterior lip, for before childbirth the mouth of the uterus presents a uniform rim or boundary. As a rule, these rents extend only through the crown of the neck, but occasionally beyond it, in rare cases to the vaginal junction. De Sinéty,* in the last edition of his excellent work, remarks that the indications for Emmet's operation are rarely presented; and at the other extreme are those who find them so frequently presented. The latter seem to have the notion that nature does wrong in suffering the mouth of the womb to be torn, and hold, practically at least, that it is the duty of the physician to restore by a plastic operation every parous to a nulliparous uterus, for, as before said, the rule is that there is some tearing of the mouth of the womb in childbirth. In fact, one might possibly express the practice and teaching of these enthusiastic devotees of the operation by parodying the advice given as to the use of

a shillalah at Donnybrook Fair,—“When-
ever you see a head, hit it:” whenever you
see a tear, stitch it. But a tear that neither by
eversion of its margins, ectropion, by local
or reflex pain, by spontaneous pain, or
that evoked by touch, by leucorrhœa, or
by menstrual disorder, makes complaint,
does not need a plastic operation: the part
is too hidden from public view to demand
an operation purely upon æsthetic grounds.
There are opinions which claim for the
operation a prophylactic power against
cancer of the organ; but the large and
accurate statistics are wanting to prove the
correctness of the opinions.

Some who oppose human cremation
claim that the ends of justice may be de-
feated by this process of disposing of dead
bodies, their identification being impos-
sible, and thus criminals may escape. Pos-
sibly as specious an argument will be sug-
gested against Emmet's operation; for are
there not some operators so skilful that
they can convert the parous into the nulli-
parous os, and thus even an expert be
deceived, declaring that a woman had
never given birth to a child when she may
have had several? But, speaking seriously,
when such perfect restoration of the ex-
ternal os uteri is accomplished, tearing in
a subsequent labor that may occur is almost
inevitable.

But, again, many of these tears which
make complaint by local disturbance, leu-
corrœa, menorrhagia, and pain,—tears
which present admirable opportunities and
invitations for plastic operations,—can be
healed by proper local treatment without
scissors and stitches. And this brings me
to the application of the vaginal tampon
for the cure of uterine retroversion, and
certain diseases of the neck of the womb,
especially its minor lacerations or tears.
The tampon is used in these cases not
merely as a support to the uterus, but for
compression, and as a means of continuous
application of medicinal substances to a
diseased part. The medicinal agent which
is of most value used with the tampon is
iodoform; and a word or two as to this
medicine and its application in diseases
of women. Iodoform was discovered in
1824, and first used as a medicine in 1836;
its antiseptic properties were made known
in 1853, and in 1866 it was applied locally
and used internally in the treatment of
uterine cancer by Eastlake.† It has not

* *Traité pratique de Gynécologie*, Paris, 1884.

† *Transactions of the London Obstetrical Society*, vol. vii.

only a decided antiseptic but also an analgesic property; besides, it is absorbed when applied to the neck of the uterus or to the walls of the vagina, appearing in the urine in the form of sodium iodide, and therefore the power of producing absorption belonging to iodine or its alkaline compounds may be claimed for it.

An objection to the free local use of iodoform was at first its expense; but this is no longer of any force, for the medicine can be had at wholesale for four dollars a pound. Another objection to it was its very unpleasant odor; and this objection has never been altogether done away with. Various deodorizing substances have been recommended, such as some of the essential oils, and balsam of Peru; and Rosetig* finally gave his preference to tonka bean, a bean doubtless more familiar to tobacconists than to doctors, and among German snuff-takers a not uncommon content of a snuff-box.

From the specimens which I show you of iodoform ointment I think you will conclude that oil of bitter almonds is the best deodorizer; balsam of Peru is objectionable because it produces partial decomposition of the iodoform with liberation of iodine, and the same holds true of oil of gaultheria. As may be seen by this specimen of iodoform cotton, partial decomposition of the iodoform occurs from the addition of gaultheria, and this change may be attributed to a reaction between the salicylate of methyl and the iodoform.

The form in which iodoform is most frequently used in diseases of women is that of ointment. Martin, for example, who has given † iodoform the highest praise, saying, after a series of applications of it in different uterine diseases, that its value could not be overestimated, used it as an ointment made by combining it with vaseline and lard, adding a few drops of peppermint oil or of balsam of Peru; he used this not only as a vaginal suppository, but also had it rubbed into the hypogastrium. Odebrecht used it as a rectal suppository, and commended its value especially in chronic exudative processes. The only form in which I have used it is that of an ointment composed of one to three drachms of iodoform to an ounce of vaseline. Another form in which I doubt not

it may be usefully employed is that of iodoform cotton, some specimens of which as recently made for me by Mr. Harris, in the drug-store of Blair's Sons, Philadelphia, are now shown you. It is made by dipping absorbent cotton in a saturated ethereal solution of iodoform; after the ether has evaporated the cotton has doubled its weight from the added iodoform; that is to say, one hundred grains of iodoform cotton contains fifty grains of iodoform. I think the value of this preparation will prove to be great; it may be used, for example, in place of the ordinary iodoform suppositories in the vagina, both as an analgesic and where a strong disinfectant effect is sought; it would be useful as the part of the tampon applied to the os uteri in a case of abortion where tamponing the vagina is necessary. Certainly, too, the absorption of the agent would be greater if thus used than when incorporated with a fatty body or when mixed with glycerin.

Tamponing the vagina, as well as the application of iodoform, I was led to adopt upon the recommendation of Dr. Taliaferro, a distinguished practitioner and teacher of Atlanta, Georgia, he having published his method and its success a few years ago.

Probably the best material for a vaginal tampon in general is absorbent cotton. Marine lint has been proposed; but this is so harsh I doubt if the tampon made of it could be properly introduced without pain, or worn without causing more or less vaginal irritation.

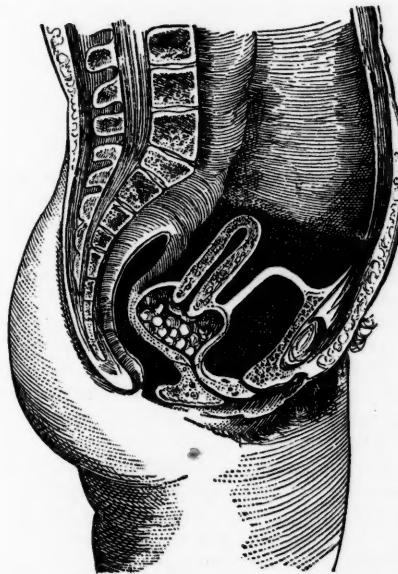
Preparing for the application of the tampon in these cases, one needs ten or twelve round masses of the absorbent cotton, each being somewhat less than a hulled walnut; next, have a piece of cotton, either with or without being first dipped in glycerin, formed into something of a cup-shape, and in the concavity put at least a drachm of iodoform ointment. The instruments needed are a pair of long, curved forceps, and a Sims's or a Simon's speculum. Let me here remark, by the way, that the Sims instrument, as often found in the shops, has altogether too narrow and concave a blade: a broad, shallow blade will prove more useful.

The patient lies on either the gynaecological table or on a hard bed, usually upon her left side, the under arm thrown behind, the lower limbs flexed, and the upper one thrown forward so that the knee touches

* Wien. Med. Wochenschrift, 1881, No. 43.
† Berlin. Klin. Wochenschrift, March 14, 1881.

the couch or table. After introducing the speculum and drawing back the perineum, the position of the uterus is examined, and, if the organ be still retroverted, it is put in normal position by the finger or by a tenaculum hooked in either lip, or simply by passing one or more of the cotton tampons high up in the posterior vaginal cul-de-sac, so as to press the body of the uterus forward, or by tampons placed anteriorly so as to push the neck backward: this done, the entire vaginal vault is filled with the cotton balls, and then the iodoform tampon placed directly over the os uteri; two or three more tampons are then introduced, endeavoring to build a column the base of which shall rest chiefly upon the posterior vaginal wall, and its anterior side upon the anterior wall. The S-shaped curvature of the vagina should, as Chrobak has stated,* be preserved, for

FIG. 1.



there support must come, as well as from the normal apposition of the two walls, and hence the tampon ought to occupy no more than the upper third, or at most upper half, of the vagina (Fig. 1). It is rarely that patients do not from the first find relief from the cotton packing, if properly done, in pronounced uterine retroversion, while congestion, and raw, unhealed, pus-

secreting, and readily-bleeding tears of the neck, are gradually relieved and often finally cured. I have seen several cases of cervical tears in which Emmet's operation had been advised—some, indeed, in which I thought it probably would be necessary—entirely relieved by this plan of treatment.

When a tear is thus healed, when it makes neither immediate nor remote complaint, nor interferes with function, the wise practice, as it seems to me, is to let it alone. The old packing is removed and the new introduced once in four or five days during the interval between menstruation. It is very rare to find any offensive odor, provided sufficient iodoform has been used, even if the tampon has been worn a week.

Prior to the packing, in certain cases, it is advisable to paint the vaginal cervix with Churchill's tincture of iodine, or to apply the same medicine to the cavity of the neck or of the body of the womb: the indications for these local applications will be plain. Again, intra-pelvic exudates can be treated by painting the part of the vaginal vault corresponding with their position with the iodine preparation, and then applying either a glycerin or an iodoform tampon.

I have thus presented for your consideration cotton packing and the application of iodoform as a substitute for the ordinary pessary in certain cases of complicated retroversion. I commend it to the consideration of those who have never tried it, or of those who have not tried it efficiently and systematically, firmly believing that a faithful trial—faithful in all details and in continuance—of the practice will give them most satisfactory results.

There is another word to be said in favor of this plan of treatment. It is usual to state that certain forms of uterine pessaries do not interfere with marital rights. Marital rights are oftentimes in diseases of women marital wrongs, preventing or prolonging the cure, to the despair of the patients, if not to the reproach of medicine. Now, I believe that Dr. Taliaferro, in referring to the benefits of cotton packing, stated as one that it secured from sexual intercourse. That is true for the greater part of the month; but, as the packing is removed a day or two before menstruation, and a new one not made until three or four days after, intercourse at long intervals may occur, which possibly is better in some cases than

total abstinence, and certainly is better than frequency.

Let us pass now to the consideration of the tampon in obstetrics. Kormann,* whom I quote as the most recent author of a text-book upon obstetrics, observes that tamponing the vagina is indicated in dangerous hemorrhage from the genitals in pregnancy, in labor, and in childbed. In pregnancy it becomes necessary in the severe bleeding from abortion, or from *placenta prævia*; in labor, in hemorrhage from *placenta prævia*, or from ruptured varices, if the *os uteri* be not sufficiently dilated to permit the immediate ending of the labor, and in the after-birth period, the *os uteri* having again closed, an excessive anaemia forbidding immediate detachment of the placenta; and, after the labor is over, because of hemorrhage from a tear in the cervix, or from central *placenta prævia*.

Time will permit the consideration of the use of the tampon in only two of these conditions,—to wit, in abortion and in *placenta prævia*.

According to Charpentier,† in either of only two conditions is abortion inevitable: those are death of the embryo or foetus, and rupture of the ovum; but in practice neither condition can be recognized in the majority of cases; we may in some have severe pain, more or less loss of blood, the cervical canal may be so dilated that the finger readily touches the ovum, and fragments of the decidua be discharged, and yet the pregnancy continue. Apart from prophylactic treatment of abortion, the dominant indication in grave cases is presented by the hemorrhage, and the two generally-accepted means for combating this blood-flow are ergot and the tampon. Now, both on theoretic grounds and from intelligent experience, many hold‡ that ergot, acting upon the muscular tissue of the uterus as a whole, tends to imprison as much as to expel the ovum, if given before dilatation of the canal or of the opening through which the ovum is to pass has been effected. But, on the other hand, a tampon properly applied, by pressing upon the neck of the uterus, and upon the lower

uterine segment, in the majority of cases increases the energy and the frequency of uterine contractions, thus counteracting any injurious influence of the ergot. In serious hemorrhage, therefore, from abortion the combined use of these is wise practice.

While the primary effect of the tampon is to arrest the hemorrhage, and its secondary one to influence the uterine contractions, there are still two other effects to be attributed to it. Hindering or entirely preventing the escape of blood into the vagina, the tendency of the small quantity that may be poured out after it has been employed is to penetrate between the ovum and the uterus, detaching the former so that the abortion when it occurs is complete, no fragments of the membranes left behind to excite hemorrhage or by their decomposition to become a nidus for septic germs which thence may enter lymphatics or veins. Further, the tampon furnishes a support to the partially expelled ovum, whose walls are so thin, and therefore so easily ruptured, in the earlier weeks of pregnancy: here again we have a protection by the tampon from incomplete abortion.

In the application of the tampon in these circumstances a Sims speculum may be used; but I cannot regard it as essential, or indeed a speculum of any sort. Dr. Emmet has said, "It is impossible to tampon the vagina effectually without the aid of Sims's speculum." Now, there were heroes before Agamemnon, and poets before Homer. I cannot doubt that such men as Wigand and Holst, Dubois and Depaul, and countless others, effectually tamponed the vagina, though they did not use a Sims speculum.

The preparation for tamponing in abortion is first to have the requisite supply of cotton rolled in balls the size of a walnut, and then either have these dipped in a disinfectant solution, squeezing out the fluid, or—and I believe this would be better—have a small quantity of iodoform cotton to be applied directly over the mouth of the womb; next, have the vagina washed out with a two-per-cent. solution of carbolic acid. The patient now, lying upon her back, has her thighs separated, and the physician, having a position on her left side, standing or sitting as may be convenient, separates the labia with the thumb and forefinger of the left hand, or

* *Lehrbuch der Geburtshilfe*, Tübingen, 1884.

† *Traité des Accouchements*.

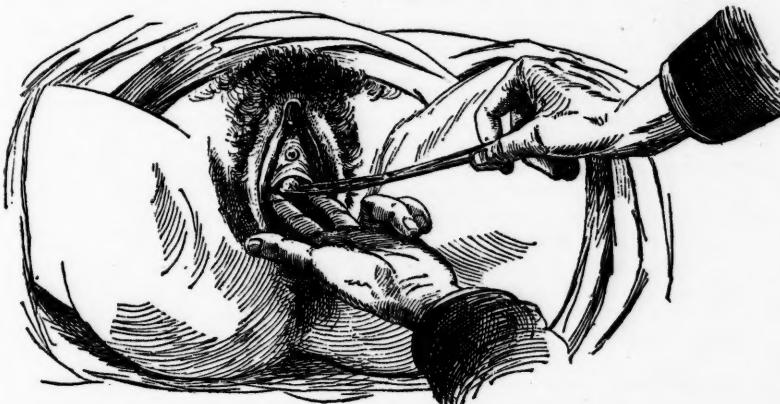
‡ For illustration, Benicke, rejecting ergot in abortion, has said that its use will cause such firm tonic contraction of the uterus that the introduction of one or more fingers is impossible (*Zeitschrift für Geburtshilfe und Gynaekologie*, 1878: *Über die Anwendung des Mutterkorns in der Geburtshilfe*).

with two fingers, thus holding the vulvo-vaginal orifice open; then, taking one of the tampons with the curved forceps held in the right hand, the cotton is carried up to the vaginal vault, and with the forceps or finger fixed in position, another mass is similarly placed, and thus the process continued until the vaginal vault is filled and the neck of the womb completely surrounded by firmly-packed cotton; next the mouth of the womb is to be covered, and then one or two more layers of the packing are placed immediately below, and thus probably one-third, or a little more, of the vagina is filled. It is not necessary to carry the packing into all the vagina: both Spiegelberg and Kleinwächter, in their well-known treatises, sustain this practice (Fig. 2).

I believe, then, that the proper treatment of inevitable abortion when the hemorrhage is serious is the combined use of ergot and a tampon to which iodoform is added; but I do not believe in the complete tamponing of the vagina, regarding it as unnecessary, nor in the addition of astringents to the tampon, for this is not only unnecessary, but often positively injurious.

Few subjects in practical obstetrics have given rise to more controversy than the use of the tampon in hemorrhage from *placenta prævia*. Some have claimed the highest value for the tampon, and are content to let the labor go on, provided the presentation is normal and the uterine contractions vigorous, no other means being used; others utterly reject the tampon, and still others use it temporarily,

FIG. 2.



So, too, it is unnecessary to add any astringent to the tampon; such medicine cannot come in contact with bleeding surfaces, but it does come in contact with the vagina, irritating it, causing its unneeded and injurious contraction: if one of the iron salts be used, the vaginal walls may be seriously inflamed. The essential idea in the use of a tampon for the arrest of hemorrhage is not the coagulation of blood, but compression. Most authorities, especially the German, direct that the tampon be left only a few hours in the vagina; but Charpentier says it should remain twenty-four, or, if necessary, thirty-six hours; and certainly, if the iodoform cotton be used, it might be left the longer period mentioned, or even twice as long, without any offensive odor in the discharge when the tampon is removed.

meeting a present indication, but only as a means to an end.

Baudelocque, nearly three-quarters of a century ago, announced the rule of obstetric practice in case of grave hemorrhage from *placenta prævia*: "The necessity of effecting delivery without having regard to the time of pregnancy, when the loss of blood is so abundant as to imperil the life of the mother and that of the child, has been recognized for more than two centuries."* And yet, if one consults Playfair's treatise on midwifery, referring to the part where the author considers the treatment of *placenta prævia*, he will see that this important rule of practice is regarded as quite recent in its enunciation.

* *Traité des Accouchements.*

Grave hemorrhage, then, it will be agreed, is an indication for prompt delivery: that is, deliver if you can. But suppose you cannot: what then? Here we must at once meet the flooding, which carries peril to both mother and child.

Such hemorrhage may occur either in pregnancy or in labor, though if in the former, labor is almost always thereby induced. Here it seems to me that the indication for the use of the tampon is plain, and all, I think, would agree to the wisdom of this practice did the accident occur in pregnancy. So far as the tampon in labor is concerned, the difference of opinion is very decided, two of the most distinguished obstetricians, for example, of this country, Dr. Ellwood Wilson and Dr. Albert H. Smith, rejecting it, I believe, absolutely. The reason for this rejection will be considered hereafter. Pajot and Bailly probably are the most eminent French obstetricians who are willing in certain cases to trust the labor entirely to the tampon. Among all who have in recent years sustained this practice, no one seems to have given proper credit to the distinguished obstetrician with whom it originated quite early in the present century, Wigand. In justice, therefore to him, and as explaining his method, let me quote from a paper* of his. Wigand, after stating that turning and *accouchement forcée* had been the practice generally received in cases of *placenta prævia*, and stating the serious dangers of such practice, observes, "These matters have been little considered: everything has been accepted as a sad, unavoidable necessity. So stood affairs when I, many years ago, desired and sought to find a better method. I was so fortunate as to find it, and often used it before the eyes of a great and intelligent public, and always with the most remarkable success. I wrote of it and urgently commended it (*im 3ten Hefte meiner Beiträge, Seite 26, und im Hamb. Magazin, 11 B., 2 St., S. 107*), and until now, so far as I know, have not had a single follower.† My method would not be favorably received by charlatan obstetricians,—this I foresaw,—for it is too simple and modest, and cannot, by a mere tampon plainly and gently introduced, produce the

noise and sensation that another method has. But that so many sincere and conscientious practitioners, so far as commendation is concerned, have passed over it, and have not even considered the matter worth a trial, I can only explain by supposing that my writings have not come to their notice, or that they (God knows the cause) suspected I had not fully, truly, and correctly observed, drawing largely from my imagination. This suspicion I hope to remove by the present writing, which will sufficiently prove that I, with a large, honest, and industriously followed obstetric practice which kind Providence favored me with, surely did not need to worry myself to deceive and prevent observation, and urge a method drawn from imagination. It has been my earnest desire and great pleasure to learn not only what there was in books, but also to see clearly the writings and occurrences of nature," etc.

In describing his method, Wigand states that in the slighter hemorrhages from *placenta prævia* he simply directs mental and bodily rest, when the flow stops only gentle exercise being permitted, internal medicines being unnecessary, unless there are some obvious disorders to be corrected. "As soon as the first labor-pains begin, sometimes at the first occurrence of decided hemorrhage, I prepare a large tampon of soft linen, dipped in a thin oatmeal gruel; and the broad end, which is first passed into the vagina, is thickly covered with powdered gum arabic and rosin. The tampon is then introduced, so that it lies in the mouth of the womb, close to the already loosened part of the placenta. In order that the tampon may remain fixed and immovable in the same place, I further fill the vagina in all directions and in all crevices as firmly with linen or fine sponge as can be done without inconvenience to the patient. A thick napkin is closely applied over the genitals, and the parturient then lies upon her left side, with her thighs close together. I hold this position to be the most suitable, because then the placenta, not with its centre, but its border, first enters the vagina; for my observation has taught me that, as a rule, it is the right side of the placenta which is first loosened and comes out of the uterus." After referring to the diseased dynamic conditions of the womb which may occur, and which the physician

* I have taken these extracts from a volume entitled "Die Geburt des Menschen," etc., edited by Franz Carl Naegeli, and published in 1820, three years after Wigand's death.

† But after his death he had many followers, and has yet. Some of them—Holst, for example—used a speculum in the introduction of the tampon.

discovering must endeavor to remove, etc., Wigand states that, should the patient after some hours complain of burning in the vagina, he takes out the tampon, replacing it by a fresh and smaller one. "But before the introduction of the latter I observe as to the following: Whether the mouth of the womb is considerably dilated, and whether the placenta has already begun to separate from one side or the other, usually the right. Whether the head or the feet, or some other part of the child, presents. Whether, especially at one side of the cervix, again generally the right side, the presenting bag of water is tense and elastic. And whether one can perceive that the presenting part of the child, as well as the separated border of the placenta, equally move down. If I find any other part of the child than the head, the feet, or the pelvis presenting, I proceed at once to turn the child, doing this with a much greater confidence, as the os is already softened and dilated, and the uterus has entered upon the birth-work and will complete my purpose.

"Once more, is the child's position normal, the configuration of the uterus good, the pains strong and efficient, the progression of the child decided, the tendency of the loosened placenta to place itself at the side of the vaginal wall plain,—if the patient's pulse is full and slow, her temperature good, or even, which is here especially desirable, she has a warm perspiration,—I leave the rest of the labor entirely to nature, which alone, sooner or later, by means of unusually rapid and powerful pains, will expel the living, healthy child, at the same time also the second small tampon, if such has been found necessary to introduce. The placenta was spontaneously expelled in all cases shortly after the birth of the child."

He subsequently remarks, "It must be sufficient for me to assure my reader that I have made use solely of this method in *placenta prævia* for many years, and have not lost a single child or mother, and, besides, have secured by it for the latter a completely normal lying-in. I do not deny that my method, like any other, has sometimes its own difficulties and complications. Thus, for instance, it cannot be applied with women whose birth-passage is so irritable that they cannot retain the tampon even for the space of fifty minutes; so, too, one would act very unrea-

sonably, and even criminally, if he would use the method when called to a woman who had bled almost to death. But in so many other cases, and applied at the beginning of the labor or of the blood-flow, this method is and remains the most successful. And, even if nothing else shall be conceded to it, it cannot be denied that of all methods it is the most suitable and reliable to properly prepare for the operation of turning, if the latter has become necessary, facilitating it for the parturient and for the operator."

These quotations prove the priority of Wigand in the tampon treatment of *placenta prævia*, and also show the extraordinary success which attended this method in his practice. But it is also shown that he did not place exclusive reliance upon it, regarding it as suitable for all cases. To-day, I imagine, few practitioners would deny the value of the tampon or fail to use it in certain cases.

Those who object to its use rest their opposition chiefly upon the ground that thereby an open is converted into a concealed hemorrhage. I answer, not if the tampon be properly applied, and if careful pressure be made during a uterine contraction and just after, so that the portion of the tampon which is then forced from the vulva is pushed back, for there is then no space left between the uterus and the upper surface of the tampon, resulting from the recession of the former after contracting, in which the blood can accumulate. Possibly it would be well to have the bandage passing between the thighs—for after tamponing for the serious hemorrhage from *placenta prævia* the T-bandage is applied—made of elastic webbing or of rubber, and thus the same end be accomplished as is proposed by manual pressure.

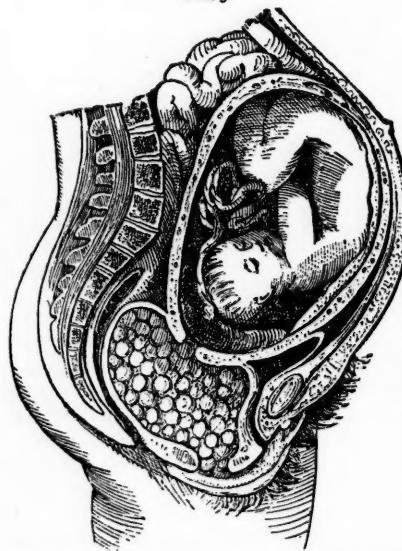
I have said that after a properly-applied tampon hemorrhage is arrested. How, for example, could any serious blood-flow, external or internal, occur when a tampon has been applied according to Dubois' method?

Depaul* has given the following description of that method, stating that he himself had followed it both in hospital and in private practice, and that it gave him excellent results. He directs about sixty balls of charpie, each about the size of a pullet's egg, to be prepared. A thread is

* *Leçons de Clinique obstétricale.*

attached to the first twelve that are introduced, then these are coated, as the others, with cerate, both to facilitate their introduction and so they may form a more compact mass, less easily penetrable by the blood, and insinuating themselves more readily in the vaginal cul-de-sacs. "I do not use a speculum in order to introduce them, since I regard this instrument as useless, if not injurious, for often its introduction causes an increase in the flow. I place in the vagina the index finger of my left hand, and, introducing with my right hand a ball of charpie having a string, the index of the left hand passes it up in the posterior cul-de-sac and keeps it in place. A second ball is similarly introduced and put by its side; then in turn a third is introduced,

FIG. 3.



and thus on, until the vagina is completely filled, and even distended. Two pieces of charpie are placed in the vulval orifice, and over these a square compress, and a T-bandage is used to keep all in place" (Fig. 3).

While it is possible to tampon effectually, as is to be seen from the extract just read, without the use of a speculum, yet this will be facilitated if one has the instrument of Sims or of Simon in the operation. But in either case, as in the tamponing for abortion, astringents are unnecessary, but an antiseptic is always to be remembered.

It must be admitted that the tendency of obstetricians has been in recent years to

the rejection of the tampon. Kleinwächter,* for example, asserts that tamponing the vagina in hemorrhage from placenta praevia is irrational. Probably the just appreciation of the tampon in placenta praevia has been given by Müller in his well-known work:† "We draw from these studies the correct conclusion as to the action of the tampon. It is not to be looked upon as a sovereign remedy, as its friends claim, nor to be excluded from therapeutic means, as its opponents desire. The tampon is an important aid, but, like many others, only in the hands of those who can properly apply it. Use it at the right time, and then no longer than is necessary. Apply it when the mouth of the womb is rigid and slightly open, if violent hemorrhage occurs, for immediate delivery is impossible. You can by it gain time without danger, for, even if it does not stop, it lessens the bleeding and prepares the yet unprepared birth-parts for labor."

It is foreign to the purpose to speak of other methods of treating placenta praevia, or I might refer to those of Puzos, Simpson, Barnes, Cohen, and others, and speak of the success of Dr. Davis, of Wilkes-barre, by a modified Cohen method, and of the more recent extraordinary successes of Hoffmeier and of Behm, though really those successes are no better as to maternal mortality, and very much worse as to foetal mortality, than Wigand claimed by his method.

May the day come when in regard to this, and to all other great questions of therapeutics, there shall be common consent as to the rules followed! "So runs my dream." But whether it came out of the horn gate or out of the ivory gate I do not know: time will tell.

1902 CHESTNUT STREET, PHILADELPHIA.

SULPHIDE OF CARBON AS A DISINFECTANT.—After a review of the subject at the request of the Prefect of Police, Dr. Du-jardin-Beaumetz recommends burning sulphide of carbon in an apparatus constructed for the purpose in the locality where a cholera-patient has been lying. Burning sulphur is the best disinfectant, but there is also a danger of burning the house in careless hands.

* *Grundriss der Geburtshilfe*, 1881.

† *Die Placenta Praevia*, Stuttgart, 1877.

REPORT ON THE PROGRESS OF
GENERAL PATHOLOGY AND
CLINICAL MEDICINE.

BY JAMES C. WILSON, M.D.,

Physician to the Philadelphia Hospital and the Hospital of
the Jefferson College.

ON INFLUENZA.

THE obscurity of the exciting cause of influenza has baffled observers from the earliest records to the present times. The resultant of the combined labors of all investigators has been simply the negative proposition that it is not any of the many things that it has been from time to time suspected to be. On the principle of exclusion the disease has been referred to miasmatic origin, and in accordance with our present views such a cause must be an organized germ,—*miasma virum*. Upon no other hypothesis can the pandemics that have at longer or shorter intervals overrun the greater part of the earth's surface be explained. Notwithstanding the general acceptance of the theory of a living cause, even the late epidemics have afforded no actual proofs of its existence. Kormann, in a recent monograph on influenza, predicted that, with improved methods of investigation and a far greater knowledge of the natural history of microphytes than heretofore, we were in a position to recognize this miasm in the next epidemic that appeared. This certainly has seemed most probable to those who accept the parasitic theory of the infectious diseases, and who believe that the specific exciting causes of tuberculosis, pneumonia, erysipelas, enteric fever, malaria, cerebro-spinal fever, and other infectious diseases have already been discovered and isolated. Whilst the great mass of scientific medical men hesitate to accept in their entirety the radical views of the German school, simply because much of the material upon which these views are based is not yet fully worked out, it is apparent that the work already done is having its influence, and that the drift of opinion is strongly towards the acceptance of the germ theory of disease, not in its original bearing, but in a far wider and more comprehensive sense.

Dr. Otto Seifert studied influenza in a limited epidemic that occurred in Würzburg during the winter and spring of 1883, with great minuteness and painstaking, with a view of clearing up some of the still

uncertain points in its symptomatology, and more especially with reference to its exciting cause. He has published the results of this work in *Volkmann's Klinische Vorträge* (No. 240, June 20, 1884). The epidemic did not present in all respects the characters usually manifested by unquestionable influenza. It was a localized outbreak, and was associated with a grave epidemic of measles in the beginning, and with a very general outbreak of whooping-cough towards its close. Nevertheless, Dr. Seifert, who saw seven cases in hospital and three in his private practice, and who heard of others from his colleagues, was satisfied of the nature of the affection, which conformed in many particulars to the ordinary clinical descriptions of influenza. First, of the fever: This showed a gradual ascent, with morning remissions, like that of typical enteric fever, to a maximum of 38.8° or 39.5° C. on the third or fourth day. The decline, beginning at once, was critical, and occupied two days or at most a part only of the third day also. After this the temperature-wave was irregular.

The spleen was in some of the cases enlarged, an observation in accord with that of the majority of observers, and thought to be of importance in view of the difficulties of diagnosis between influenza and enteric fever and intermittents. For my own part, I believe these difficulties can only occur under the most exceptional circumstances. It is not probable that a hesitancy to make a diagnosis could arise in either case except at the beginning of the attack, and the presence or absence of slight enlargement of the spleen would not be of sufficient diagnostic importance to decide any doubtful case.

Dr. Seifert's most important investigations were those bearing upon the etiology of the disease. He found in the mucus expectorated great numbers of micrococci, which measured 1.5 to 2.0μ in length and 1.0μ in breadth (magnified 350 diameters). They at no point occupied any definite relation to the pus-cells, and were situated neither within nor upon them. They were arranged in chains, or in pairs, or scattered singly. They were found in the sputa and nasal secretion of all the cases, but were not found in the secretion of the conjunctival sac, nor in the blood. They were not found in the sputa of the ordinary cases of other forms of bronchial and pul-

monary catarrh. They were best colored by methyl violet. The inoculation of two guinea-pigs was not followed by the symptoms of influenza. Culture-experiments were not carried out. Dr. Seifert proposes to call this microphyle the influenza-coccus.

Our judgment upon this subject must be held in abeyance until further researches in unquestioned influenza epidemics are made, and until the peculiar coccus, if found, shall have been cultivated and tested by inoculation experiments.

In view of the parasitic nature of the cause of influenza, and its apparent restriction to the mucous membranes of the naso-bronchial tract, Dr. Seifert suggests, in addition to the usual symptomatic treatment, direct local measures. These may consist of nasal douches of such disinfectant solutions as are least liable to irritate the tissues, and in the inhalation of like substances.

SPIRILLUM.

Dr. F. A. Mühlhäuser, of Speier, has contributed to *Virchow's Archiv* (July 9, 1884) an elaborate paper upon this genus of microphytes. His researches have resulted in a wide extension of the general knowledge of the subject, and especially in reference to its relation to relapsing fever (Rückfallstyphus).

Spirilla are microscopical bodies of the form of a spiral, and with the property of spontaneous movement. They have been long known, and were described and delineated by Ehrenberg, Dujardin, Pritchard, and others, and have been quite recently made the subject of close investigation by Cohn, of Breslau. On account of their capacity of free and lively movement, they were referred by the earlier observers to the Infusoria. Recent investigators look upon them as low plant-forms. They have been found by chance in fluids of various kinds. There has been, however, neither sure way of finding them nor definite place in which to look for them. Therefore these delicate, quick-moving little organisms long continued to be regarded chiefly as curiosities of microscopical research.

The peculiarity of their form and the liveliness of their movement have excited a great interest in all who have observed them, and but for the difficulty in discovering their habitat they would have long ago become a favorite object of micro-

scopical study. In 1873, Obermeier made the remarkable discovery of spirilla in the blood of patients suffering from relapsing fever. These resembled in all respects those previously seen under other circumstances. Owing, however, to the difficulties of the whole subject, very little advance has been made until the present time in our knowledge of these parasitic microphytes. The success of H. Vandyke Carter in cultivating spirilla in the blood of monkeys by means of the inoculation of the blood of relapsing-fever patients is well known. Cases of relapsing fever, fortunately, are rare and transient. Dr. Mühlhäuser complains—purely from the stand-point of the microscopist, I trust—that epidemics of this disease have not yet occurred in South Germany. Notwithstanding this fact, his researches have been bountifully rewarded, and he has discovered a locality in which spirilla are to be found at all times and in abundance. He found on one occasion in the stool of an enteric-fever patient, after it had stood a long time, a number of spirilla of large size (*Spir. volutans*). Further investigations in the same direction, it is true, failed. But the field of investigation was extended so as to include various putrefying fluids. At length spirilla were found in the water of a vase of flowers. Foul infusions or macerations of the most varying mixtures of both animal and vegetable substances, bog-water, drain-water, mucus, faeces, contained other microphytes of various kinds, but in most instances no spirilla.

Finally, in the places where the discharges of the domestic animals are collected, namely, dung-heaps, spirilla were found in abundance. The oozing fluid of such places contains everywhere, and at all seasons of the year, these little organisms in such numbers that they appear to be an essential product of the processes going on in it. It contains that form of spirillum which appears to resemble most nearly the spirillum of relapsing fever, and that form only.

Those interested in following the author's description of the development of spirilla, of their various forms, and his lucid account of their movements, their striving after oxygen, and other matters of their natural history, which is indeed wonderful, are referred to the original. I quote briefly some statements which are of peculiar interest to physicians:

Fully-developed, long spirilla live usually during only a single day, and it is the result of a most wonderful chance that Dr. Obermeier came upon them in this short period in the blood of patients. They are the cause of relapsing fever, and not accidental appearances, not *épiphénomènes*, as Lewis believed.

Relapsing fever constitutes an experiment by which is determined the length of time required for the development of the spirilla and the influence of warmth and albuminate. Rühle (1883) stated that observations under the microscope showed that the fully-developed spirilla reappeared in the "moist chamber" at the same time as in the blood of the patient. At the height of the primary attack the long spirochæte fall to pieces, forming the seed of new spirochæte, which on the seventh day of the intermission are full-grown, and this process repeats itself until the death or convalescence of the patient. It is not the high temperature, as Heidenreich believes, that causes their destruction, but their age. This refutes the view of Lewis and Murchison that the spirilla are the result and not the cause of the fever. The more contagious a disease, the finer and more movable its spores. Mülhäuser believes that the spores of the spirochæte of relapsing fever are so minute that, borne in the air, they enter the body by the air-passages or by contact with the skin, and thus in susceptible persons produce the disease.

In this connection, the following remarks, published in 1881 in an article on Relapsing Fever,* are not wholly without interest :

"The conclusion that this parasite has to do with the causation and development of relapsing fever is inevitable. It constitutes the contagium. The spores of these spiral filaments, communicated from individual to individual, spread the disease. Finding in the human body the conditions favorable to their development, they multiply indefinitely. The functional perturbations to which their presence gives rise constitute the phenomena of the fever. It is probable that, under favorable circumstances outside the body, their existence may be prolonged through a considerable length of time. This existence may be latent, yet capable of assuming the

most energetic activity when introduced into the human body. Such being the case, the possibility of transmission to remote points follows, and the rise of epidemics at considerable intervals of time and at points far distant from each other is comprehensible without the assumption of the independent origin of the germs of disease, or the new development of an old poison. It is much more in accordance with the general laws of nature to accept a continuous concealed existence of the germs than to have recourse to spontaneous generation to account for their development.

"The origin of an epidemic is due to the importation of the *materies morbi* in the person and belongings of a patient, or in other materials from an infected locality, or else to circumstances calling into activity germs that have maintained a latent and harmless existence during a more or less extended lapse of time. The history of relapsing fever in all great epidemics points to scarcity of food and its attendant evils as the conditions favoring the activity of relapsing-fever germs.

"When the disease has appeared in any locality it spreads with great rapidity by contagion, but in every community it forms centres of greatest prevalence. These foci are determined by the dense crowding together of the poor in the most wretched quarters of cities, and by impure drinking-water and stagnant water in the neighborhood of dwelling-houses."

THE ETIOLOGY OF PHTHISIS.

It is certainly a striking fact that in two instances within as many months earnest protests against the too-ready acceptance of the conclusions drawn from the discovery of the bacillus tuberculosis have been published in Berlin. In *Virchow's Archiv* for June 6, 1884, Wargunin, of St. Petersburg, called a halt, and urged upon the profession the importance of hesitancy in accepting views so radical and as yet unreconciled to universal clinical experience. The theory of Koch calls up a host of questions which, in its present phase, it is inadequate to answer. This protest is based upon an elaborate study of the lesions produced in the lungs of dogs compelled to inhale repeatedly (a) the pulverized fresh sputum of phthisical persons, (b) the same disinfected, and (c) the sputum from a patient suffering from emphysema,

* The Continued Fevers. By James C. Wilson. New York, 1881.

and mixtures of cheese and of meal. The result was in all these experiments the same,—the production in the lungs of disseminated lesions of exactly the same kind, having the macroscopic characters of tubercles. Histologically, however, the process was essentially a lobular bronchopneumonia, resembling the desquamative pneumonia of Buhl, and etiologically to be classed in the category of pneumonias due to the inhalation of foreign substances. It is true that the bacillus was not found, for the announcement of its discovery was made just as Wargunin's researches were concluded, and it was not sought for. Nevertheless, that those disseminated lesions were not tubercular may be assumed from the fact that all the dogs thus treated, which were afterwards placed under good hygienic conditions and allowed to live, fully recovered, and in two of them that were killed for examination after a period of six months the lungs were found in an entirely normal state. In none of the dogs subjected to these experiments were there evidences of any general disease.

Dr. P. Langerhans, of Madeira, contributes to the same journal for August 5, 1884, a paper which is of interest as embodying the results of observations bearing upon the positive influence of heredity in the etiology of phthisis on the one hand, and the negative influence of such exposure as is peculiarly favorable to the spread of diseases by contagion on the other. These observations, conducted with much painstaking, and in a singularly circumscribed locality, the island of Madeira, and in particular its capital, Funchal, and its immediate surroundings, are worthy of a more extended notice than the present space at my disposal permits. Koch demonstrated that the bacillus caused acute miliary tuberculosis. The bacillus is thus the virus of acute miliary tuberculosis. But neither Koch nor any other of the many experimenters who have performed inoculation with the bacilli and with tubercular débris have succeeded in bringing about a process which bears the most remote resemblance to chronic pulmonary phthisis. The bacillus is, it is true, present here, and often in abundance. But its presence by no means determines its causative relation to the primary lesions, nor even, in the absence of further evidence, to the secondary lesions of this complex lung-affection.

The objections to the theory of Koch appear to Dr. Langenhans so well founded that they deserve the most earnest consideration, especially in view of the present "bacillus enthusiasm." Two methods of observation must yet be worked out.

First, the examination of the lesions in the early stages of phthisis; second, the critical study of all possible etiological factors. His paper is a contribution to the second of these methods.

In the limited colony of foreigners at Madeira he has had the opportunity of tracing out from registers and other information the personal history of 267 persons, resident on the island in the year 1836, when the necessary data were for the first time preserved. Of these, 210 were in good health and had no traceable hereditary predisposition; 57 were members of families who had settled upon the island on account of pulmonary diseases.

Of the 210 healthy persons, 86 were still living at the date of the writing of the paper; 124 deceased; 4 had died of phthisis; none of those still living suffered from that disease.

Of the 57 consumptive or predisposed persons, 5 were in 1836 under 10 years of age. Of these 5, none died under the age of 20 years; 35 are deceased, 9 of them of phthisis.

A second group consists of persons who came to Madeira after the year 1836 and before the year 1864, and whose stay upon the island continued till death or extended over a period of at least twenty years. This group numbered 115. Of this number 83 were sound, 32 consumptive or predisposed.

Of the 83 sound persons, 31 were at the date of writing deceased,—none in consequence of phthisis,—and not one among those still living presented any sign of that disease. Of the 32 consumptive or predisposed persons, 22 have come upon the island suffering from established phthisis, 10 merely predisposed by descent. Of the 22 already ill, 12 died of the disease,—7 at Madeira, 5 elsewhere; 5 died of other affections, making in all 17 deceased. Of the 10 merely predisposed, none have developed the disease. A third group is of especial interest. It comprises the children of the 267 residents in 1836, and of the 115 later comers, numbering 253. Of this number 147 were healthy, 106 consumptive or predisposed. Of the 147, 28

have died,—1 of phthisis; of 119 still living, none have phthisis; of the 106, 23 have died,—8 of phthisis; and of 83 still living, 8 were known to suffer from phthisis.

Of 635 persons thus far, 440 were sound, 195 consumptive or predisposed.

Of 440 sound, 203 are deceased,—5 of phthisis; 237 are yet living and free from phthisis.

Of 195 not free from taint, 75 are deceased,—29 of phthisis; and of 120 still living, 12 suffer from the disease.

These figures are subject to the errors which affect such statistics everywhere; but the elaborate tables and analyses of Dr. Langenhans certainly amount to evidence of great importance as to the influence of heredity.

On the other hand, the life on the island has been extremely favorable for the spread of phthisis by contagion, if such had been its method of extension. The sick and the well live in this community, as everywhere, in the closest association, occupying the same houses and the same rooms, using the same furniture and utensils.

In conclusion, it is proved by actual case-histories that in the health-colony at Madeira, since 1836, those individuals only, almost without exception, have contracted phthisis in whom there existed a hereditary predisposition, although the different constituents of the colony were exposed in precisely the same way to the same favorable conditions for infection.

NEW INVENTIONS.

AN ARTERY-COMPRESSOR.

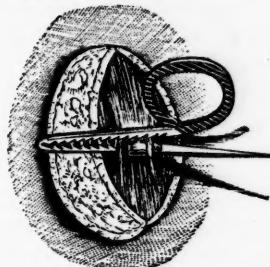
A CONVENIENT and effective appliance has been devised by Dr. Levis for the rapid arrest of hemorrhage in large open wounds. It is exceedingly simple and inexpensive.



Numbers of the compressors can be quickly applied during an operation, and the surgeon may leisurely ligate the vessels if, after their removal, the ligature should be required. In many operations, attended for the time by great hemorrhage from numerous small vessels, the temporary sta-

sis produced by the compressors will be sufficient to prevent further flow.

By this device the operator can proceed to the end of an operation without stopping to apply ligatures.



The instrument and its application are so illustrated in the cuts that description is unnecessary.

The compressors are made by Snowden, 7 South Eleventh Street, Philadelphia.

NOTES OF HOSPITAL PRACTICE.

MEDICO-CHIRURGICAL COLLEGE.

CLINICAL SERVICE OF JAMES E. GARRET-SON, M.D., PROFESSOR OF THE PRINCIPLES AND PRACTICE OF SURGERY.

SURGICAL TREATMENT OF NEURALGIA.

TO-DAY, gentlemen, I am to bring before you four patients illustrative of extremes in the surgical treatment of a condition known to the general public as neuralgia.

As the hour will be fully occupied in the operations to be performed, I shall enter into no discussion as to the multitude of causes out of which nerve-pain arises and in which it exists, but will proceed at once with what is to be done, suggesting, parenthetically, that science applied to the treatment of neuralgia means knowledge directed to appreciation of relationship between cause and effect. Pain is intangible: it is not to be seen, tasted, touched, or heard; it is not substantive; it is phenomenal; neuralgia is not principal.

Case 1.—The young gentleman now introduced is a professional *confrère*. For three years he has been a martyr to facial pain of an excruciating character, the region affected being the infra-orbital. During these three years the sufferer has been my patient, and during these years I have

exerted myself to get understanding of the lesion which holds the meaning of the pain, and which, whatever it may be, is to be removed as making our only road by which pain may follow. I stand before you this hour confessedly ignorant of the cause of the man's pain; to me it has proved beyond finding out.

What is to be done with effects of this character where causes cannot be discovered? How many are the experiences suggested to the recollection of every practitioner by the query!

Facial neuralgia is at times of a character that is simply unbearable. Something has to be done. The something is anything that will afford ease. A present good is discounted at the expense of a future ill. You object to what you do, yet do it. You disclaim, but perform.

Now, if there be one class of men which, beyond all others, should avoid the use of morphia, it is the student class. Here in my hand is a hypodermic syringe. It is charged with one-quarter grain of morphiae sulphas, dissolved in eight drops of water. Because that the patient cannot endure his pain, and because, truthfully, I know not how else to relieve him, I am going to place this morphia beneath his skin. Objecting as I do to the use of any opium preparation, you are to accept that in the present, as in any of my cases, I resort to the drug only when pushed to the wall. For months I relieved our friend here by the nightly use of a Volta's pile bound over the painful part; indeed, the relief continued so long that we were both congratulating ourselves on having come to a cure. On failure of the pile, Blaud's pills were used, in doses of fifteen grains of the dried ferri sulphas, and the same quantity of carbonate of potash daily. Apropos, let me say that in cases of the unexplainable neuralgias no single remedy has proved so useful as these pills. My prescription is as follows:

R Ferri sulphatis exsic.,
Potassii carbonatis, $\frac{1}{2}$ gr. ccl.;
Syr. acaciæ, q. s.—M.

Ft. pil. no. 100.

Sig.—Begin with three a day, and increase to six; take several hundred.

A remedy that not infrequently proves serviceable in paroxysmal neuralgia is Duguesnil's preparation of aconitum, in doses of gr. $\frac{1}{200}$, repeated each two hours until numbness is felt; but in this case it did no good.

Brown-Séquard's somewhat famous pill amounts generally to nothing: here it was tried faithfully by the patient on his own prescription.

A local application commonly of great use, but here yielding no result, is a combination devised by Dr. J. L. Ludlow:

R Atropinæ sulphatis, gr. ss;
Aconitinæ, gr. iss;
Olei tiglii, gtt. ii;
Ung. petrolii, 3ii.—M.

Not to delay, it may simply be added that I have looked this patient all over in search after cause, and have, as yet, failed to find it. I have treated him tentatively with every medicine in which lay hope of doing good, yet have secured no cure. It is to be the contents of this syringe, gentlemen, or it is to be agony. The former seems to me to be the smaller of the two evils: so I choose it.

In employing medicaments hypodermically, attention is to be directed to the avoidance of throwing the fluid into a vessel, also to the prevention of abscess. In the first matter knowledge of anatomy and the sense of sight are to be used. In the second, care is taken to avoid rupture of the cellular tissue, an accident which happens alone to the physician who is in too great hurry to get through the operation.

Standing over the patient, I introduce the needle by the side of the nose. The syringe, as you see, occupies an inverted position. I force the piston a trifle, but depend partly on gravity to get the morphia deposited. I break no cells, and will have no abscess.

Case II.—The second case is this robust colored man. His trouble is sciatica; that is to say, he has neuralgia, or nerve-pain, in the sciatic region. The cause here is rheumatism. To afford immediate comfort to the patient, I charge a syringe with eight drops of chloroform and introduce the needle its full length into the muscles of the ilio-femoral crease. "Does the injection burn?" we ask him. His reply is, "Not particularly."* In two days this application will be repeated, while at once the man will be put on the use of strong lemonade.

Here a very practical experience is to be kept in memory: hypodermic injection of chloroform, while affording relief from

* In half an hour the man was entirely free of pain, from which he had been suffering for two weeks.

neuralgia as the sciatic region is affected, acts exactly conversely when used about the face.

Case III.—The patient before us is, as you see, a delicate woman. The neuralgia here is of long standing, and confines itself to the region furnished by the temporal branches of the auriculo-temporal nerve. A peculiarity is the continued manifestation of vascular disturbance limited to the immediate locality. The intention in the case is to ligate the temporal artery and to extsect the auriculo-temporal nerve.

To do either, or both, of these operations, I will commence by making a vertical incision along the front of the ear, reaching, below, as far as the zygoma. The vessel lies under, or rather in, the temporal aponeurosis, and to reach it safely a director is wisely employed. [The artery, having been exposed, was then ligatured.—REP.]

The vessel being now taken care of, I search for the nerve. No difficulty is experienced, you see, in finding it: I show it raised upon the hook. I now dissect out a portion and cut it off. The wound will be put up to unite by first intention.

Case IV.—The present case is to show an extreme as to operations for nerve-lesions. The affection here is disease of the inferior maxillary nerve and of its mylo-hyoid branch. The performance proposed is extsection of the root of the nerve where it issues, at the base of the skull, from the oval foramen.

The manipulations to be practised will worthily command your close observation. The intention is to show how, by means of instrumentation, complexity is resolvable into simplicity. I am to show that the foramen ovale is to be reached without making observable scar upon the face, and without disturbing the integrity of the lower jaw.

Several years back, having occasion to extsect the inferior maxillary nerve for a refined and very handsome young lady, I was urged by recognition of the deforming scar left by the usual operation to set to work to devise a better. What grew out of the study is shown in the plate handed around (Fig. 1). A glance at the diagram by the surgeons who favor me with their presence this morning will, I am sure, render either description or commendation unnecessary. I do not hesitate to say that I think it will be long before the device is improved upon. The incision

seen, it is to be understood, when healed, is in the shade-line below the jaw.

Fig. 2 shows a second operation belonging to the surgery of the region, which I devised and practise for securing section of the same nerve where it emerges from the skull into the zygomatic fossa. This

FIG. 1.



is the performance I am now to execute in your presence.

The patient, the gentleman just brought in, is a great sufferer from persistent neuralgia, related with the inferior maxillary nerve and with its mylo-hyoid branch. He can neither talk nor eat with comfort. He describes his life as made by this pain altogether miserable. He is one of a class which asks itself, not without a show of philosophic reason, "Is life worth living?"

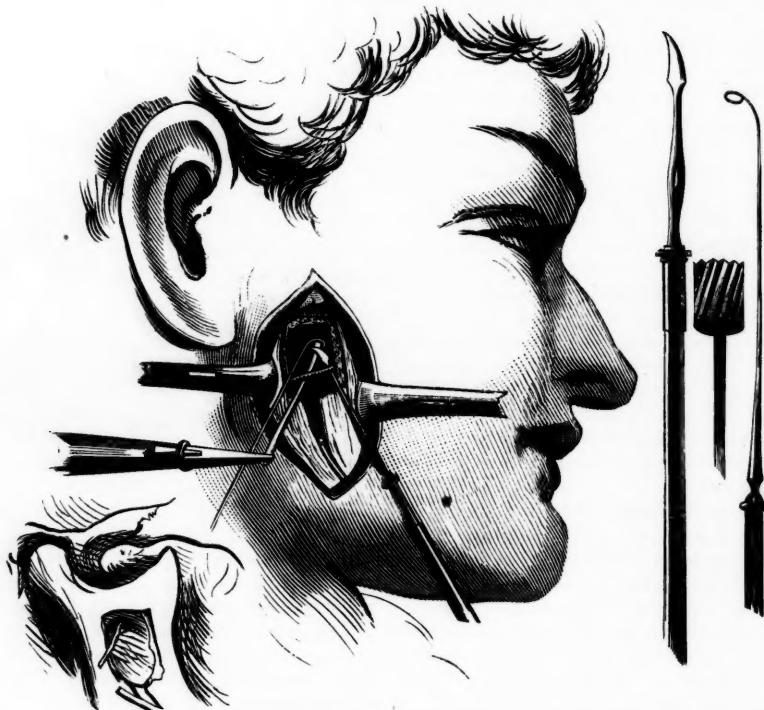
The resolution of philosophic conundrums of this class lies always with knowledge. All that is needed is to know how to change the aspect of a condition. Luckily, as the present case is concerned, wisdom abounds in this clinic. We have learned that the man's neuralgia relates with a diseased nerve, and we know how to rid the sufferer of the nerve.

You understand that it is the intention

to expose the situation of the oval foramen and to excise the nerve. The patient being etherized, I commence with an incision which begins an inch above the angle of the jaw and which is carried downward and forward to the length of an inch in front of it, this cut being in the shade-line below the bone, which shade-line, to avoid injury to important parts covered by it, is pulled upward upon the jaw and thus incised. Ligation of the facial artery is commonly made necessary as a result of this first step. . . . It is

Here I introduce the surgical engine. The meaning of this machine is to revolve cutting instruments. I show you (held in my fingers) a burr. This burr is unimportant-looking, but when in revolution ten thousand times to the minute you may trust it to make a hole through the front of a brick house. A burr running ten thousand times to a minute shows no motion, but I would not advise you to trust its quietude. Here the intention is to cut into the face of the maxilla until the canal is opened and the nerve exposed. This I

FIG. 2.



The artery in the diagram should be placed higher: it crosses the sigmoid notch.

required in the present instance, as the spurting vessel makes evident.

Hemorrhage controlled, retractors are introduced, as here done, and the lips of the wound separated. Now is exposed, as all see, the periosteum-covered bone. A succeeding step uses the raspatory, which quickly denudes the part of a limited portion of its covering. I ask you to observe the extent of the part uncovered. It is not great,—sufficient simply to make ready for that which is now to follow.

proceed to do. . . . A single minute has, as you remark, sufficed to accomplish it.

Next, I pick up the nerve, and, cutting it in twain, I grasp the end next the brain in the teeth of the bull-dog forceps. Lifting it by means of this convenience, I follow upward with the burr until, as now I feel, I am at the situation of the posterior dental foramen. This foramen it is the intention and purpose to enlarge (see Fig. 2). With the instrumental means possessed, no difficulty is experienced in doing

this. True, a steady hand, acquaintance with the anatomy of the part, and a knowledge of the instrument you handle are not unimportant addenda; but, as you perceive by the present easy going on of the process, there is nothing at all difficult or complicated in the performance; perhaps, however, there is a little in "the know how."

The nerve being now firmly in the grasp of the forceps, and an opening of sufficient size being made in the ramus of the jaw, attention is to be given to a hemorrhage which you recognize as coming, not from the internal maxillary artery, but from the inferior dental. I have simply to pick out the vessel and to cast a ligature about it.

The audience is now to observe that I can pass a *fenestra* about this nerve, and that I can touch with the projected instrument the oval foramen. (Dr. Janney, the ex-coroner, who sat close to the operator, was asked to repeat the operation, which he did, passing the instrument the length of the zygomatic fossa.) Now, what I need to complete the operation after a high scientific method is a delicate guillotine, which Mr. Kolbe is engaged in making for me after a pattern, but which, not being ready, I duplicate with a tenotome, an instrument dangerous to use by reason of the presence of the internal maxillary artery, which, as is to be remembered, passes from the carotid *externus* immediately across the head of the jaw and is inconveniently in the way of a sharp blade.

I show you, gentlemen, the incised nerve. The operation is done.*

TRANSLATIONS.

PARENCHYMATIC INJECTIONS OF TURPENTINE IN MALIGNANT GROWTHS.—From a series of injections of turpentine into the interior of malignant growths in order to influence their development, Dr. Vogt reports (communications from the Chirurgical Clinic in Greifswald) as follows: The first case was a return after extirpation of a carcinomatous breast, which showed itself as a rapidly-growing tumor pressing forward from the anterior mediastinum. One-half of a Pravaz syringeful of a solution of equal parts of alcohol and oil of

turpentine was injected. In a few hours there was severe pain, fever, and erysipelatous redness of the breast. After forty-eight hours the temperature declined, but the general malaise lasted several days longer; the tumor had become visibly contracted. In ten days a second injection was made, with the same effect at first, but afterwards an abscess formed. Two more injections were made during the next few weeks. In the course of two months a gradual shrinkage of the tumor took place, which then remained as a decidedly hard tumor without any abnormal heat. The patient was then discharged.

The second case was one of multiple sarcoma, which was treated in the same way, with the same results, including the abscess. In the course of five weeks, after repeated injections, the tumor had almost disappeared.—*Centralblatt für Chirurgie*, No. 36.

SALICYLIC ACID AS A PROPHYLACTIC AGAINST CHOLERA.—Dr. Beaudon, in a letter to the *Bulletin Général de Thérapeutique* (August 30), recommends the systematic use of salicylic acid as a prophylactic agent in case of a cholera visitation. He proposes a five-per-cent. alcoholic solution, of which a teaspoonful is to be added to a glass of water: with this the hands and the mouth are to be washed two or three times daily. This precaution should be especially exercised by medical men, who, in case of epidemic, are called upon to expose themselves to the contagion. A teaspoonful might also be taken, in water, with the meals. This method, if it does not destroy the microbes, will at least put the patient in a condition less favorable for their development.

CAUTERIZATION OF THE WOUNDS MADE BY RABID ANIMALS.—In commenting on the report of a case of rabies, Dr. Dujardin-Beaumetz endorsed the following recommendation of the *Conseil d'Hygiène Publique* contained in a publication in 1882:

"The cauterization should be made with Vienna paste, chloride of zinc, butter of antimony, and especially with the hot iron, which in such cases is the best of the caustics. On the contrary, the use of ammonia, the different alcohols, tincture of arnica, and carbolized solutions is absolutely ineffectual."—*La France Médicale*, No. 106.

* The operation was done on September 6. The relief continues perfect up to the date of this issue, October 4.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, OCTOBER 4, 1884.

EDITORIAL.

VOLUME XV.

THE PHILADELPHIA MEDICAL TIMES, with this issue, begins a new volume. During its fourteen years of continuous publication it has achieved a success which is substantial and real, and established a bond of unity with the profession that enables its management to speak with reasonable assurance as regards its future. The progress that has been already made, it is believed, represents a permanent gain, and from the present advanced standard we expect to triangulate forward, as Dr. Holmes happily puts it, over fields yet to be occupied, and thus acquire new elements of value. The reviews of progress in various departments of medicine, introduced last year, have been well received by our readers, and will be continued; the correspondence, both domestic and foreign, will be extended, and prompt attention will be given to current events in medical circles and medical societies.

The fact that contributors to the *Times* are remunerated for their articles by the publishers at the highest rates paid by medical journals enables the editor to make a selection, and to accept those only which are deemed most valuable. In this respect the volume published during the last year, certainly, compares favorably with other volumes which have gone before.

Finally, the action of the publishers in reducing the subscription to one-half the price of last year deserves especial mention, as we think it will tend to increase the popularity of the *Times* and extend its influence with the profession.

The *Times* being a bi-weekly, it is en-

abled to record the progress of medical art with more deliberation and discernment than if it possessed a more ephemeral character. In conclusion, we ask the attention of our readers to the literary as well as the scientific merit of its contents, and to the mechanical execution and press-work, which will be always kept at the highest attainable standard.

MYCOLOGY IN OLD CLOTHES.

TRUTH is universal, and the language in which it is clothed is an accident of time and place. Hence literature abounds in thoughts so alike and expressed in terms so similar that it sometimes seems literally true that there is no new thing under the sun. Even the latest work of science, in fields wide and strange as any that knowledge yet has reached, often finds some suggestion in the writings of antiquity so apt that it seems like the forgotten record of old truths that are new only to us.

The Greek historian Eratosthenes (275-194 B.C.), according to Strabo (66 B.C.-24 A.D.), held with the Homeric school that the three continents of the Old World constituted a connected island, around which flowed the great sea, Oceanus. But he added in his account that there was doubtless another great world-island, or even several, in the farthest regions of the earth. To this Strabo adds that if this indeed were the case the creatures found in such new worlds would be different from those in the old. When we reflect upon these statements in connection with the discovery of the American and Australian continents, they seem indeed prophetic. Prophecy has many a time gone wider of the mark.

Not less remarkable is a passage that occurs in the writings of M. Terentius Varro (116-27 B.C.). This writer, described as encyclopædic and prolific, contributed much to an exact knowledge of Italy, his native land. In the first of his

three books "De Re Rustica" is to be found the following modern view in an ancient garb: "Si qua erunt loca palustria crescent animalia quædam minuta, quæ non possunt oculi consequi, et per aëra intus in corpus per os et nares pervenient atque efficiunt difficiles morbos." Who does not recognize in this description the *Bacillus malariae*? Dr. Kotelmann, of Hamburg, to whose erudition the citation of this passage at the present time is due, points out the curious correspondence between it and modern doctrines based upon the most recent work.

That *difficiles morbos* refers to malarial fevers may be well assumed, since they not only now form but have formed throughout historical times the most common and severe diseases of Italy. To the wide extension of these diseases bear witness the many recently-discovered drainage-systems, the object of which, as has been shown by Secchi, Tucci, and Tommasi-Crudeli, was to relieve the land of this scourge.

The *animalia* is a discrepancy less wide than it at first appears. It is not so long a time since the schizomyces were regarded, on the authority of Ehrenberg and Dujardin, as animal organisms and classed as vibriones with the Infusoria: For the first time in 1853 were they recognized by Cohn as plant-forms, and referred to the *Algæ*; later Nägeli classified them with the *Fungi* as "spaltpilze."

Aside from this point of difference between the modern view and that of Varro, the description is marvellously accurate. The disease-exciting organisms are too small to be seen by the eye,—microscopic, as we say; they are in swampy places, where they develop under the favorable conditions of moisture and heat, and rather in the moist earth itself than in the water; from the surface of such earth, so soon as it is dried by summer heat, and thus exposed, they are wafted into the air; they gain access to the body chiefly by the organs of

respiration; finally, they are the occasion of affections that may well be termed *difficiles morbos*. High temperature, splenic enlargement, with pigmentation of its substance, enormous development of malarial bacilli in the blood, spleen, and marrow, have followed the artificial infection of guinea-pigs by Klebs and Tommasi-Crudeli, a description that corresponds in all respects to the disease produced by natural infection in the human being, where the organisms *per aëra intus in corpus per os et nares pervenient atque efficiunt difficiles morbos*. For Marchiafava found the malarial bacilli in the spleen and marrow of three cases of pernicious fever, and the same author—and, after him, Cuboni, Marchand, Rozaheggi, and Ziehl—found in the blood of ague-patients bacilli seemingly identical with those of Klebs.

NOTES FROM SPECIAL CORRESPONDENTS.

LONDON.

THIS is the holiday season, and little is going on in medicine, beyond the necessary attention to the sick and dying, for Death wields his scythe irrespective of seasons and convenience. In many instances a difficulty has been experienced in finding a consultant in cases of emergency; and it seems to me that it would be no bad thing to have a list somewhere of who are in town and who are out, for such emergencies; only, where could it be kept? Then, again, whose names should appear, and, what is more, whose names should *not* appear? There are certain difficulties in the way of such an arrangement, but they are difficulties which could be got over if approached in a spirit of earnestness and honesty. Why should not a list be hung up at the Colleges of which public notice could be given, so that the practitioner in attendance upon any case could direct the messenger where to go in order to get the required information? This would not be advertising any one's name, because it would not be bringing names before the public, but only informing the public where to go to see who is in town at any particular time. If it were known that such lists existed and where they could be seen and consulted, much inconvenience could be avoided without injury or detriment to any one. Such a scheme is

practicable without any charge of advertising being brought against those whose names appear. Some heart-burnings there would be, doubtless; but it would not be impossible to draw a line. At the College of Surgeons it could be drawn at the Fellows, and at the College of Physicians at the Fellows and members. If a man is not in request on other accounts, the appearance of his name on the list would do neither him nor any one else good or harm. That something of this kind must be instituted ere long is as certain as that sickness does not strictly follow the season and avoid the holiday. It is very awkward for a general practitioner in attendance upon a grave case, perhaps a really important life, not to be able to find a consultant when a consultation becomes desirable. A friend of the patient is sent into town, and wanders about here and there till he finds some one to take out with him, perhaps some one who is far from what is desired, while, likely enough, a man possessed of the knowledge requisite to the proper understanding of the case is at home, only the messenger knew not where to find him, even if he knew of him at all. If such lists were kept at the Colleges, the practitioner could write up to the porter to ask if certain men were in town, and, if not, if certain other men were at hand. There could be no objection to such an arrangement, which would be of infinite service to the public, unless it were raised by some interested persons. A well-known consultant goes out of town and leaves directions that any patients who call shall be sent on to certain *protégés* of his, if necessary. But it is by no means a necessary sequence that his selection is also that of the patient, who very probably would prefer some one else. But to wander about London, calling first at one door and then at another in vain, seeking a consultant, is scarcely an attractive prospect for a person out of health. Nor is it to write to ask several men if they are at home much better, when likely enough the letter will form one of a weekly batch sent off to North Wales or the Border. Men's names are known in connection with certain classes of maladies, and it would not be a practical difficulty for a general practitioner to ascertain which of them were available in an emergency where their counsel would be of service to him and his patient, if such lists were kept. The reader may possibly experience a difficulty about the line I draw at the College of Surgeons as compared to that at the College of Physicians, and, in order to make all plain to him, it may be well to explain the respective positions at the two Colleges. The membership of the College of Surgeons is the examination for entering the profession, corresponding to the licentiate-ship of the College of Physicians. The next step is an examination of a higher order, for the Fellowship of the College of Surgeons or the membership of the College of

Physicians, and a good sound examination it is in each case. This examination passed, the surgeon takes his permanent position as a Fellow of his College, and is eligible for a hospital appointment. But with the physician he becomes only a member, which puts him on the list of consultants: there is a further step, and he may be promoted to be a Fellow of his College, on what terms no one seems to know, beyond that he must gain the support of eleven out of the fifteen electors, and how their choice is guided is a profound mystery. It is not inspired by heaven; that is pretty evident! What is requisite to gain a man the support of these eleven electors has never transpired or been made public. Out of these Fellows the lecturers before the College, the examiners, etc., are chosen, and to be merely a member is to stand out in the cold as regards the perquisites of the College. But the Fellows of the College of Physicians are a select body, albeit so mysteriously elected. A curious illustration of this is furnished by the post-office directory. In this the Fellows are indicated by a star (*), the members by a dagger (†), and the licentiates by a double dagger (‡), so that the public shall know beyond the possibility of doubt or cavil who are the men honored by the College. By what underhand proceedings, by what "ways that are dark and tricks that are vain," this classification was engineered, it is not possible to say. Whether the audacity or the impertinence of the classification is the more remarkable, transcends the judgment of ordinary minds. If it is desirable to draw such distinctions between the lower and higher divisions in the case of physicians, why, in the name of common sense, is it not extended to the surgeons? On the other hand, if surgeons are not to be marked off into higher and lower strata, the division-line being a very stiff examination, why should physicians of the higher class be marked off when the division-line is not a solid examination, but a shadowy semblance of a boundary, founded on nothing more substantial than caprice or favoritism? The utter absurdity of the thing as it at present stands is obvious to any one who takes the trouble to examine into the matter. It is pretty certain that the publishers of the Directory must have been induced by some Fellow of the College of Physicians to make the distinction; and possibly the tempter hoped by such action to give himself and his co-Fellows a boost in public opinion. The inconsistency of the whole thing is absurd, and the distinction is so ridiculous that the wonder is that the College of Physicians does not request the publishers to remove these *indicia*. It certainly would if it had any respect for itself. The incident is a funny illustration of what a dignified (?) corporate body can stoop to, on the one hand, and, on the other, a curious instance of how some man has planned a microscopic device to give

some men a lift at the expense of others. It cannot be a surprise to any one that the position of the medical profession here is not what it really ought to be, when it can so utterly forget its duty to itself and its self-respect. There are some very indifferent traditions in the profession, which, instead of being forgotten, as they should be, are still lived up to by those who ought to be ashamed of them.

To turn to another topic, of a different character, the necessity for a more thorough understanding of digestion, its disturbances, and the means to be adopted where the digestive system is very much impaired as to its functional activity, is borne in upon one by the lessons of daily practice. Not only in conditions of acute disease, where the digestion is almost annihilated, but in some very pronounced cases of more chronic character, the subject of feeding the patient is one of paramount importance. Milk is our sheet-anchor, doubtless, but, unfortunately, milk is distasteful to many persons, while it is apt in certain cases to curdle so firmly in the stomach that the curd never falls to pieces again until voided per anum, in consequence of which it is worthless as a food, while the firm curd is a source of irritation to the bowels, setting up diarrhoea, and in cases of enteric fever even endangering the patient's life, by the possibility of tearing the bowels at some spot weakened by ulceration. Not even where the precaution is taken of mixing it with an alkali, as Seltzer water, or Vichy, or Vals water, can this risk be entirely obviated. At the London Fever Hospital, in order to avoid too firm curdling, and the consequential dangers thereof, some farinaceous material is added to the milk, so that the curd will not be too firm for subsequent disintegration. What is often wanted is something which will sit easily upon the stomach (for if it do not it is soon rejected by vomiting) and at the same time require but a minimum of the digestive act. This last is of cardinal importance. Such a food should contain material readily convertible into grape-sugar, a certain proportion of albuminoids, and some fat. Milk, with baked flour, comes nearly to this standard. By the act of baking, starch is advanced on its way to grape-sugar. Crusts of bread, the well-baked outer portion of the loaf, soaked in hot water and mixed with milk, present a form of starch requiring little saliva to complete its conversion into grape-sugar. The different "baby-foods," too, present great advantages as food for those who are either pronouncedly dyspeptic or whose digestion is partly impaired by acute disease. Where fluid food alone can be taken, the contact with the salivary diastase is too brief to be of much service, and unless the starchy materials have had some previous acquaintance with diastase they will in all probability be voided per anum unchanged. Probably in acute disease

little diastase is formed, whether salivary or pancreatic. Be that as it may, it is well to be upon the safe side, by giving as food farinaceous material which has already been acted upon by diastase. Such a food is malt-extract, under whatever name it is sold. A good malt-extract is a valuable food,—a costly food, doubtless, but a food of priceless value at times of emergency. We are accustomed to look at malt-extracts too purely from their diastatic point of view,—*i.e.*, as artificial digesters of starch by their free diastase. But they possess a value beyond that, which is scarcely sufficiently recognized. Even where the diastase has been to a large extent killed by careless preparation, there remain the albuminoids in soluble form, the phosphates in like form, and so much maltose or digested starch. Consequently, a malt-extract is a very valuable food, and, what is more, is a food which sits well upon the stomach in almost all instances. Indeed, in a very bad case, seen some months ago, the medical man in attendance upon the case had tried every food which the patient could tolerate, except malt-extract, and the only thing left for me to suggest was that a teaspoonful of malt-extract be given every hour. This was done, the stomach did not resent the presence of so small a bulk, and after a fortnight other food could be taken, and soon the patient got quite well.

In another case, a like quantity of the Cremona Hordeatus (Loefflund's Alpine Cream preserved with malt-extract) gave most desirable results. In fact, in very grave gastric cases malt-extract is a food which may often be resorted to when almost at one's wit's end what to do. This food can be taken either alone, or mixed with milk or with Seltzer water, as the patient pleases, and can either form part of a meal or be taken betwixt meals, or it can be added to beef-tea or chicken-broth. Such meat-tea alone has a very small food-value, but the addition of baked flour or malt-extract makes a mighty difference, and the combination constitutes a capital food. In cases of phthisis where the digestion is upset and there is a palpable danger of the patient sinking from inanition, such food is indicated, and is usually well borne. It may alternate with milk with advantage. It must be borne in mind that just as a variety of food is craved for by people in health, so some variety is relished by the dyspeptic. Milk, with Seltzer water, may precede some beef-tea with baked flour, and that again be followed by some compound food containing maltose, with milk. Murdoch's Liquid Food is said to agree well with an irritable stomach, but I have no personal experience to offer on the subject. Then some stewed fruit may be given in such cases where it agrees with the patient. But cane-sugar is very apt to undergo acetous fermentation in the stomach, and so give rise to much acidity, and hence is contra-indicated in many cases.

But, where it can be taken, the juice of stewed fruit makes a pleasant change; though, unfortunately, this is not often the case. More frequently the changes must be rung on milk and malt-preparations. Maltose differs widely from cane-sugar in the liability of undergoing acetus fermentation in the stomach, rarely, if ever, undergoing that change. This is another argument in favor of malt-extracts for invalids. Indeed, there seems a great prospect before us, in a very troublesome class of cases, of being able to surmount the difficulty in feeding the patient by means of the skill of the chemist. Of course there is another matter to be attended to, which is not unimportant, and this is, that, as only a small bulk of food can be taken at once, it is necessary, in order to provide the patient with a sufficiency of nourishment, that these little meals should be taken at frequent intervals. About one-third of a pint, at once, every two hours, is enough to start with, and as the stomach gains power the quantity can be increased. But, as variety is pleasant to all, a little white fish boiled may be added to the "baby-foods" after a certain amount of improvement has been attained. It is as well, however, to remember the old proverb, "the more haste the less speed;" for never is the truth of the adage more forcibly illustrated than in the case of dyspepsia, where precipitancy and anxiety to get on very commonly defeat their own aim. A little bismuth with soda and nux vomica is a good combination, so far as medicines are concerned, to commence with. But ipecacuanha is the drug *par excellence* when it can be borne. That this is an hepatic stimulant of no mean power is now generally admitted. It is notorious that in full doses ipecacuanha is an emetic. In smaller doses it increases the activity of the gastric secretion while stimulating the muscular fibres of the stomach. Consequently, it is a drug of great potency in cases of deficient power in the digestive organs; and, as a pill, two-thirds of a grain of ipecacuanha, with a dose of strychnia, a little black pepper in extract of gentian, or aloes and myrrh pill, or compound colocynth pill, according to the state of the bowels, is in constant use with me in cases of indigestion. By it before meals, and McKesson & Robbins's egg-shaped pepsin pills after, the number being regulated by the patient's necessities, and a suitable regimen, ordinary cases of indigestion can be made to move on satisfactorily. But there is a lower stratum than this,—viz., a class of cases where only the most easily digested foods can be taken at all; where the stomach cannot be bullied, and where compromise alone is practicable. In these very troublesome cases "baby-foods" are our sheet-anchor to start with. And even when something approaching an ordinary meal can be taken in small quantities, a glass of milk with some good malt-extract in it—about two hours after the meal, when the contents of the

stomach are passing the pyloric ring—is a good addition to it. The increasing failure of digestive power of the present day calls into action the skill of the chemist; and, fortunately for dyspeptics, the chemist possesses the skill.

J. MILNER FOTHERGILL.

PROCEEDINGS OF SOCIETIES.

LEHIGH VALLEY MEDICAL ASSOCIATION.

THIS flourishing young Society held its fourth annual session at Mauch Chunk on Tuesday, August 19. There were present of the Association, including those elected at this meeting, sixty members. Besides, there were some forty others, who, with wives and daughters, made the grand gathering number nearly two hundred.

The principal session was held in Concert Hall in the morning, and during this session the ladies were exploring the recesses of Glen Onoko.

The Association was called to order by its President, Dr. R. Leonard, of Mauch Chunk, who, after the roll-call, delivered the President's Address of Welcome. He selected as his topic "Some of the Obstacles and Difficulties in the Way of the Scientific Practice of Medicine: more especially in Country Practice." This address well merited the close attention it received: it was true to the life. He classified the difficulties under—1, a want of care in nursing; 2, ignorance of the really "professional" nurse (professional because they profess); 3, the general ignorance of the average man of his own physical make-up; and, 4, the worst foe,—those in our own ranks or who borrow our name for their own individual ends.

At the conclusion of the address, most of the business was transacted, and then the audience was delighted with Prof. Parvin's paper on the "Tampon." (See page 8.)

The only thing to mar the address was the approach of the dinner-hour, causing the lecturer to hasten. The heartiness with which the vote was given to thank Prof. Parvin for his address, and again to make him an honorary member of the Association, was an evidence of the appreciation of the Association.

After dinner, the Association and guests took cars for a trip around the Switchback. A short session was held at Summit Hill, to receive and act upon the report of the Nominating Committee.

Dr. Joseph Thomas, of Quakertown, was elected President, and Dr. Charles McIntire, of Easton, was re-elected Secretary.

The Carbon County Society furnished a refreshing collation, and the cars were taken back to Mauch Chunk, by gravity. A hand-shaking, good-byes, and embarking on the trains brought the session to an end. C.M.

REVIEWS AND BOOK NOTICES.

ATLAS OF FEMALE PELVIC ANATOMY. By D. BERRY HART, M.D., F.R.C.P.E., Lecturer on Midwifery, School of Medicine, Edinburgh, etc. New York, D. Appleton & Co., 1884. 4to, cloth.

This beautifully-printed atlas consists of thirty-seven full-page quarto plates and accompanying letter-press, not only illustrating the various elements constituting the female pelvic anatomy in a normal condition, with numerous dissections, but also showing various displacements caused by posture, pressure, or pregnancy. The illustrations are fine specimens of lithographic work in colors, except the microscopic reproductions, which are apparently by the heliotype process. There are also a number of wood-cuts given in an appendix in explanation of some points in the physics of the bladder and rectum.

Dr. Hart needs no introduction to American readers of gynaecological literature: it is, therefore, especially gratifying that this magnificent work was published in this country and under the direct supervision of Dr. Alexander J. C. Skene, of New York.

A study of these plates—many of which were original and are beautifully executed, every care having been exercised to obtain accurate representations from nature, others being from well-known monographs—will serve in a measure to correct some of the crude and imperfect knowledge of the relations of the pelvic viscera which has grown out of the errors of the popular text-books and led to confusion of ideas as to the pathology of many disorders of the organs involved, and no little discussion as to their diagnosis and proper treatment. We advise those interested in the diseases of women to examine this book for themselves.

THE THEORY AND PRACTICE OF MEDICINE. By FREDERICK T. ROBERTS, M.D., etc. With Illustrations. Fifth American Edition. Philadelphia, P. Blakiston, Son & Co., 1884. pp. 1008, 8vo.

Compared with the previous edition issued four years ago, the text of the present shows on nearly every page evidences of careful, intelligent revision. There is a full appreciation of, and due consideration given to, the many additions to modern pathology and therapeutics which have been made in that time. It is characterized by clearness of style, directness of expression, correctness as to its teachings, and brevity without dogmatism. The numerous additions, which would have otherwise materially increased the size of the work, have been provided for by a slight reduction in the size of the type; and the change from two volumes to one makes the work rather more acceptable to American readers, on account of the greater conveni-

ence for reference. The present edition fully maintains the standard of a work for the merits of which we entertain a high opinion as a most useful, correct, and practical work on the practice of medicine for the student either before or after graduation.

GLEANINGS FROM EXCHANGES.

THE NEOPLASTIC DIATHESIS.—M. Verneuil, in an address delivered before the International Medical Congress, said that he desired to prove: (1) that all true neoplasms, by the identity of their constitutional origin and their primary causes, make up a natural pathological group; (2) that they grow by virtue of a special disposition of a particular morbid disposition,—in a word, of a diathesis which he calls neoplastic; (3) that this diathesis is neither original nor independent, but derived from a much more general constitutional derangement,—arthritis. This led him to say that the true neoplasm is an arthritic manifestation of the same type with biliary gravel, eczema, rheumatism, gout, etc. He explained at length these three propositions, commencing by a general review of neoplasia and its varieties, as well as of the different neoplasms. Among these last he retained only those which he called idiopathic or true, and after setting forth their anatomical, physiological, clinical, and etiological characters, he arrived, by summarizing these characters, at the following definition. A true neoplasm is an accidental organ, definite, superfluous, and harmful, formed by the hyperplasia of anatomical elements and tissues morphologically and chemically altered,—an organ which is the seat of a perverted and disordered nutrition and a local manifestation of a particular diathesis, having its root in the arthritic dyscrasia. This definition has as its object the definite constitution of the group of neoplasms, too often confused with that of tumors. In the second part of his address, M. Verneuil drew attention to the fact that the etiology of neoplasms was imperfectly known and not sufficiently studied. He criticised the etiology at present accepted, and, in particular, the abuse which has been made of the word diathesis. He admitted but one diathesis for all neoplasms, at all ages, and in all conditions. This diathesis he believed to be hereditary. When it existed in a family, it could transmit itself to the descendants under a like or a different form. The oneness of the diathesis was proved, further, by the multiplicity and the diversity of the neoplasms in the same subject at one and the same time, or at different periods of life, by the multiplicity of pathological tissues in one and the same tumor, by the substitution of one form of neoplasm by another at the same spot. He examined, with the view of refuting them, the objections to the oneness of the diathesis,

based on the differences of structure, of the course, and the gravity of the different neoplasms. He further laid it down that, if the ordinary causes cannot give rise to a neoplasm without the neoplastic diathesis, this in turn is powerless to produce anything of itself, and without the aid of the requisite causes. In the third part of his address, M. Verneuil, recognizing that the admission of a diathesis does not determine the question of etiology, set himself to prove that the neoplastic diathesis springs directly from arthritism, an idea already introduced to science by Bazin, but so far imperfectly demonstrated. He brought in as arguments supporting it the association, or the almost constant association, of neoplasms and arthritic manifestations, and, at the same time, the extreme rarity and almost incompatibility of these same neoplasms with scrofula, itself far removed from arthritism. Professor Verneuil, in concluding, said he did not conceal from himself the fact that his ideas presented a broad side to criticism, and that he must, to have them accepted, keep up facts and proofs. He had not, however, hesitated in laying them before the Congress, in the hope that they would give rise to both discussion and observation, and would contribute, by the study of etiology, to raise practice out of the pure surgical path, in which at present it was exclusively occupied.—*British Medical Journal*.

THE ETIOLOGY OF TUBERCULOSIS.—With a view to prove the exact relationship of tubercle to the bacilli with which it is associated, further investigations have lately been carried on by Koch, and he lays down the following statements:

The bacilli are always found in greatest abundance in those tissues where the tuberculous process is most active, whilst, when the caseous masses appear, the bacilli disappear, and assume a spore-like condition, in which they cannot easily be stained, and are therefore easily overlooked. In all the slower tuberculous processes, *e.g.*, those which are observed in joints, the bacilli are only found in the giant cells, and often one bacillus only is present in each giant cell. These giant cells are produced from simple cells by the irritation of the bacillus. If the process is a very rapid one, it does not end in caseation, but in the shrivelling up of the cell, and injection of the neighboring connective tissues.

In scrofulous lymphatic glands, and in joint and bone affections, if the bacilli are found at all they are very rare. This is also the case with lupoid affections. In some cases forty or fifty sections will reveal only one bacillus.

When these various tuberculous deposits were employed for injection purposes the same result was produced in animals of the same species and variety. Even the slightest variety in an animal gave a variety in the result: *e.g.*, whilst the field-mouse was very suscep-

tible to inoculation, the white mouse was not.

Sometimes the same animal at different times showed a varying susceptibility; and this result Koch is inclined to ascribe not so much to variety in the infective material as to the resisting power of the individual. (*Mittheil. aus dem kaiserl. Gesundheitsamte*, vol. ii., Berlin, 1884.)—*Practitioner*.

THE COLOR OF CANNABIS INDICA.—It having been asserted by Dr. MacLagan that the green color of the extract of cannabis indica is due solely to the presence of copper, Dr. Squibb has made a series of experiments which prove that it is due originally to chlorophyll, and that a fluid extract could be made without a trace of copper, although a trace could be detected in commercial specimens in the proportion of 1 to 3700 parts, therefore in a quantity too small to do harm. In future this accidental impurity will be avoided by Dr. Squibb by the substitution of glass for copper vessels in making the extract.

CHOLERA-GERMS.—Drs. Maurin and Lange, who have been working at Marseilles since the departure of Koch, claim that they have discovered the missing link in the propagation of the cholera-bacillus, in the shape of a mucor which appears on the fourth or fifth day on putrefying cholera-stools, and on these only. It has the form of a mycelium with cup-shaped sporangia, which burst on the slightest agitation, discharging vast quantities of spores, which, after deposit upon putrid organic matter, develop into an anaerobium, which they believe to be the immediate cause of cholera, and which in turn sporifying produces the bacilli of Koch.—*British Medical Journal*, September 6.

SULPHOCARBONATE OF ZINC.—says the *Riv. Ital. di Terap.*, is a valuable disinfecting material, whose good qualities, though long known, have been passed over in favor of less active agents. Bottini has recently been experimenting with it, and warmly recommends its use in antiseptic surgery. A five-per-cent. solution is quite strong enough, and it may be used in the form of spray or applied by compresses, etc. It is also useful for the disinfection of knives and other instruments.—*National Druggist*.

MISCELLANY.

AN ENGLISH CHOLERA COMMISSION.—The English government having directed Dr. Klein and Dr. Heneage Gibbes to go to India to pursue a scientific inquiry into the nature of cholera, they have sailed for the scene of their labor. It is understood that these gentlemen will act in conjunction with the commission nominated a few weeks ago by

the Indian government for the same object.

A WARNING TO BATHERS IN THE SCHUVELSKILL.—A boy who was recently bathing in the river Medlock, in Manchester, got out of his depth and swallowed some of the water, which was particularly filthy. Though immediately rescued by another lad, he expired shortly afterwards, death, it is stated, resulting not from drowning, but from poisoning.—*Lancet.*

A MEDICAL COLLEGE SUED.—Suit has been entered against the Georgia Eclectic Medical College of this city for fifteen thousand dollars. It is alleged that the Faculty violated the State law by graduating students who had not attended two full courses of lectures.—*Atlanta Medical and Surgical Journal.*

WE learn from the daily press that some friends of Dr. J. V. Shoemaker, of this city, gave him a dinner at the St. George Hotel on Saturday night, the 20th of September, to welcome him on his return from Europe.

THE AMERICAN PUBLIC HEALTH ASSOCIATION holds its annual session this month, in St. Louis, Missouri, commencing on the 14th and ending on the 17th, at which A. L. Gihon, M.D., U.S.N., will preside. A large and interesting meeting is expected.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE held a very successful session in this city last month, which was honored by the presence of a large number of visitors from the British Association. The official report of the proceedings of the meeting will appear in *Science*.

JUDGE ELCOCK recently decided that the Act of Assembly with regard to the sale of poisons does not apply to physicians' prescriptions, and the clerk of Mr. McKelway was very properly discharged from custody for not labelling a box of pills "Poison," although, being taken in excess of the amount directed to be administered, they caused the death of a young girl.

DRS. PROTHERO AND HEYWOOD SMITH, distinguished gynaecologists of London, father and son, who have been visiting the city, were entertained at lunch by Dr. Albert H. Smith on the 20th ult., and met a number of invited guests.

NOTES AND QUERIES.

WOMEN STUDENTS IN VIENNA.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

DEAR SIR.—It seems very true of each one of us that, as we go through the world, we find that which we seek, and fail to see that which does not interest us.

Being a woman, and having spent a year in study at Vienna, I would like to supplement the "Letter from Vienna" contained in your number of July 26 by giving you a short

sketch of the medical work women are enabled to do in the "Allgemeines Krankenhaus."

The chief attraction for foreign students is the series of private classes for diagnosis and practical work in the hospital wards, taught by the assistants and docents. To these classes only those can be admitted of whom the professor of the department approves. It is necessary for a woman coming to Vienna for study to be able to show a diploma of graduation from a recognized medical school at home, and, as a rule, to meet the professor of the department personally. With his approval, she then enters the same classes with the men.

During the past year twelve women (English and American physicians) have taken courses in the hospital: four Englishwomen, one a graduate of the London University and three from the King's and Queen's College of Physicians in Ireland. The remainder were Americans, and graduates of the medical schools in Boston, Philadelphia, Chicago, and San Francisco.

Two American women who are at present in Vienna are recent graduates of the Paris "École de Médecine," which admits women as matriculantes and enables them to take the same courses, pass the same examinations, and confers upon them the same diplomas men receive. A Roumanian lady, a graduate of this school, has also recently gone to Vienna for study.

The professors and assistants whom we have met during the past year have treated us most courteously, and we have enjoyed privileges for study in the same classes with the men in the clinics, wards, and laboratories of Professors Billroth, Kondrat, Kaposi, Nothnagel, Schröter, Stellwag, Wiedehofer, Bamberger, Politzer, Salzer, and Exner.

Three large sections of the hospital, belonging respectively to Professors Carl Braun, Gustav Braun, and Späth, consist of the lying-in wards. These are open in turn, each for twenty-four hours, for the reception of women in labor. Ten thousand births take place here every year.

Prof. Gustav Braun has the department for the training of the midwives under his charge. (Prof. Späth has not been connected with this branch of the work for at least ten years.)

Professors Carl Braun and Späth do not admit women-physicians to their lying-in wards, although Prof. Späth gave his own card to one of our ladies, introducing her to his assistant, Dr. Lumpey, with whom she desired to obtain work in gynaecology.

Women-physicians enjoy greater facilities for obstetrical work than they could obtain in the wards of either of the above professors, by taking the private courses in the wards belonging to Professor Gustav Braun, which do not admit men. These consist in a "touch course" (the examination of pregnant women), an operative course on the phantom, and a series of obstetrical operations, versions, breech deliveries, forceps deliveries, etc., on the living in the lying-in wards. The midwives take charge of normal labors alone, and have special lectures and demonstrations from Prof. Gustav Braun. Any woman-physician desiring to study the phases of labor in a number of cases, and willing to enter upon the drudgery it entails, has the privilege of entering the school for midwives. This does not exclude her, however, from the physician's course. One of our number, desiring to give special attention to the subject, took both courses at the same time during the past year.

I am surprised that Dr. Wilson's memory should have failed him on these points, as I know he must have learned them from the four women-physicians who boarded at the same pension with himself in Vienna.

In a letter which I had occasion to write Dr. Wilson during his short stay in Vienna, I spoke of our inability to enter certain courses at the time. I had reference then to courses in gynaecology, most particularly a touch and operative course given by Dr. Pawlik, docent in Prof. Bamberger's clinic. Since Dr. Wilson left Vienna, this course has also been opened to women, a lady from Winchester, Massachusetts, having taken it during June and July. I myself had the privilege of visiting his clinic, and the promise of a place in his next class (he admits only four at a time) could I wait until October. Two American women have their names already put down by him for that course.

Dr. Lott, also a privat-docent of the university, has given four women an operative course in gynaecology during this summer: so that I know of no branch of the work now in which women do not enjoy equal advantages with the men.

Dr. Wilson will pardon me for making this correction, as I felt in part responsible for his misunderstanding. In one of his letters to me he states that he considers the movement for the medical education of women as requiring "active measures for suppression." This feeling has, I fear, led him to do us this injustice in not presenting the true facts of the case. Had he said we could not matriculate in the Vienna University and take the lectures with the students and the university examinations, he would have been correct (an institution which does not offer a medical education to the women of its own country cannot be expected to do that for

foreigners); but to say that we "have failed to gain any recognition in Vienna" is a grave error, to which not only the women studying there, but the professors and assistants, can testify.

ANNA M. FULLERTON.

PARIS, August 23, 1884.

[From a letter of Dr. Carl Breus, privat-docent in the University of Vienna, and recently assistant to Prof. Gustav Braun, written August 28, 1884, we take the following upon the same topic, confirming Dr. Fullerton's statements.—ED. MED. TIMES.]

"Dr. Anna M. Fullerton has recently shown me a letter from Vienna in the *Philadelphia Medical Times* of July 26 of this year, and requested me to write to you.

"What is said in said journal about the position of women-physicians with the faculty of Vienna is in point of fact incorrect. The *legal matriculation* of women for medical study in Vienna, it is true, is not permitted; but most of the professors afford to women-physicians from abroad an entrance to the institutions which they teach as *guests*, precisely as they do to the men-physicians.

"The courses of most of the assistants and docents stand open for women, and are resorted to by them. I myself have repeatedly taught operative obstetrics in courses for women-physicians as assistant in the clinic of Prof. Gustav Braun, covering all the ground proper for the instruction of physicians, and not merely such as would be given for midwives. On the whole, the women-physicians who visit the clinic of Prof. Gustav Braun have there the full rights of doctors, and stand entirely apart from the midwives, who are separately taught.

"They are allowed, under my supervision, to perform for themselves the difficult operations on women in labor, which are in no case whatever permitted to the midwives, who are never allowed to make even an episiotomy.

"At the clinic of Profs. Carl Braun and Späth women-physicians are not admitted; but at the clinic of Prof. Gustav Braun women have the opportunity of acquiring all practical and theoretical obstetrics. For these facilities they are to be envied on account of the less abundant amount of material divided among the frequenters of both the other clinics."

[These communications were shown to Dr. Wilson, who writes as follows:]

MR. EDITOR:

DEAR SIR.—In reply to the above, I would simply state that I disclaim any intention whatever either to suppress or exaggerate the facts: I merely presented them to your readers as they appeared to me while recently in Vienna.

Truly yours,
CHARLES MEIGS WILSON, M.D.
1517 WALNUT STREET, PHILADELPHIA.

OFFICIAL LIST

OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U. S. ARMY FROM SEPTEMBER 14, 1884, TO SEPTEMBER 27, 1884.

CALDWELL, D. G., MAJOR AND SURGEON.—Granted leave of absence for one month and twenty days, to commence about October 15, 1884. S. O. 95, Headquarters Division of the Missouri, August 16, 1884.

MIDDLETON, PASSMORE, MAJOR AND SURGEON.—Having reported from sick leave of absence, assigned to duty at Fort Leavenworth, Kansas. Paragraph 2, S. O. 188, Headquarters Department of the Missouri, September 19, 1884.

CRONKHITE, HENRY M., CAPTAIN AND ASSISTANT-SURGEON.—From Department of the Plate to Department of the Missouri.

TAYLOR, ARTHUR W., LIEUTENANT AND ASSISTANT-SURGEON.—From Department of the Missouri to Department of the Platte. Paragraph 1, S. O. 215, A. G. O., September 13, 1884.

WHITE, R. H., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty as post-surgeon at Fort Winfield Scott, California, relieving Assistant-Surgeon A. S. Polhemus, who, upon being relieved, will report to the commanding officer, Alcatraz Island, California, for duty. Paragraph 1, S. O. 113, Headquarters Department of California, September 19, 1884.

HALL, JOHN D., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty at Fort Townsend, Washington Territory, to relieve Surgeon R. S. Vickery.

Surgeon Vickery, on being relieved, directed to report to commanding officer, Vancouver Barracks, Washington Territory, for duty. Paragraph 3, S. O. 140, Headquarters Department of Colorado, September 15, 1884.

WILSON, WILLIAM J., CAPTAIN AND ASSISTANT-SURGEON.—From Department of Dakota to Department of the East. GARDINER, J. DE B. W., CAPTAIN AND ASSISTANT-SURGEON.—From Department of Arizona to Department of the East.

CORBUER, WILLIAM H., CAPTAIN AND ASSISTANT-SURGEON.—From Department of the East to Department of Arizona.

LA GARDE, L. A., CAPTAIN AND ASSISTANT-SURGEON.—From Department of Missouri to Department of Dakota. Paragraph 1, S. O. 220, A. G. O., September 19, 1884.

TESSON, L. S., CAPTAIN AND ASSISTANT-SURGEON.—Directed to report to commanding officer, Fort Stockton, Texas, for temporary duty. Paragraph 3, S. O. 127, Headquarters Department of Texas, September 22, 1884.

BIRMINGHAM, H. P., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Leave of absence extended twenty days. Paragraph 2, S. O. 116, Headquarters Division of the Missouri, September 22, 1884.

MADDOX, T. J. C., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Directed to report to commanding officer, post of San Antonio, Texas, for duty. Paragraph 5, S. O. 121, Headquarters Department of Texas, September 22, 1884.

BARROWS, C. C., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Granted one month's leave of absence, with permission to apply to the proper authority for an extension of one month. Paragraph 4, S. O. 86, Headquarters Department of Arizona, September 13, 1884.

BARROWS, C. C., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Leave of absence extended one month. Paragraph 6, S. O. 97, Headquarters Division of the Pacific, September 19, 1884.

DIETZ, W. D., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to duty at Fort Selden, New Mexico, (post-surgeon). Paragraph 4, S. O. 157, Headquarters Department of Missouri, September 18, 1884.

MC CAW, W. D., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to duty as post-surgeon, Fort Craig, New Mexico. Paragraph 5, S. O. 157, Headquarters Department of Missouri, September 18, 1884.

LIST OF CHANGES OF STATIONS OF NAVAL MEDICAL OFFICERS FROM SEPTEMBER 14, 1884, TO SEPTEMBER 27, 1884.

P. A. Surgeon G. E. H. HARMON, September 16, from Navy-Yard, Norfolk, to Naval Academy.

P. A. Surgeon W. A. McCLURG, September 16, from Naval Academy to Naval Hospital, Philadelphia, Pa.

P. A. Surgeon PHILIP LEACH, September 16, from Hospital, Chelsea, Mass., to the "Palos."

Surgeon J. W. COLES, September 16, as member and recorder of Naval Examining Board, and to Hospital, Philadelphia.

P. A. Surgeon E. Z. DERR, September 16, to Navy-Yard, New York.

Surgeon B. S. MACKIE, September 16, from Training-Ship "Jamestown" as member and recorder of Naval Examining Board.

Medical Inspector D. KINDLEBERGER, September 18, from "Harrick," sick.

P. A. Surgeon S. H. DICKSON, September 19, permission to leave United States.

Medical Inspector D. BLOODGOOD, to Washington, for examination preliminary to promotion and as to qualifications for sea-duty, October 1, 1884.

Medical Director W. T. HORD, as member of Naval Examining Board, October 1, 1884.

Medical Director T. J. TURNER, as member of Naval Examining Board, October 1, 1884.

P. A. Surgeon J. C. BOYD, placed on waiting orders, September 25, 1884.

Surgeon A. S. OBERLY, to Washington, for examination preliminary to promotion and as to qualifications for sea-duty, October 1, 1884.